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Yale university. Dept. of education.

A Co-Operative Study of New London Schools

VOLUME I

I. SCHOOL MANAGEMENT

II. PATTERN OF ORGANIZATION

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Department of Education
Yale University
June, 1949

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**TO THE PUBLIC: Questions and Answers prepared by the Board of Education,
New London, Connecticut.**

1. What is the Yale Survey?

The Yale Survey is a study of

Maintenance of School Plant
Custodian Service
Budget and Accounting Procedures
Purchasing and Supply Management
School Buildings
Enrollment Trends
High School Education

in New London. It is planning both for the present and for the future.

2. What is the need for such a study?

The Board of Education feels: (a) that school buildings are relatively old in New London; (b) that elementary enrollment is rapidly increasing locally and on a state basis; (c) that school costs will naturally increase; (d) that the taxpayers are interested in the cost of education; (e) that the public is interested in getting the best education for its money; (f) that New London's education be comparable to that of other communities of similar size and financial ability; (g) that the entire educational program in New London is of sufficient complexity to warrant the best thinking on this subject; (h) that the New London school system is a large scale enterprise in terms of investment, annual cost, and replacement value.

3. What will the Survey cost?

The Board of Education is spending \$6000 for this Survey.

4. Where did the money come from?

The money is not an additional appropriation either by the Board of Education or by the City Council. It was taken from the regular school budget of 1946-1947 and put aside for this purpose.

5. Who is conducting this Survey?

Members of the Graduate School of the Education Department of Yale University. Two eminent members of this Survey Committee are: Dr. Clyde Hill, Sterling Professor of Education at Yale University and Dr. Samuel Brownell, President of New Haven State Teachers College. These men have engaged specialists in various aspects of School problems. Included in this group are Mr. Edward Nelson, Assistant Superintendent of Schools in Hartford, Connecticut, and Dr. W. H. Pillsbury, former Superintendent of Schools in Schenectady, New York, and past President of the American Association of School Administrators.

6. What benefits are expected from the Survey?

The Board of Education feels that no Survey is valuable unless it leads to definite results. The recommendations of the Survey are to include plans for possible school building expansion in New London; better business procedures for the schools; planned high school growth in terms of cost and curriculum; new district lines for elementary schools; better services in terms of gymnasium and auditorium facilities and a comprehensive maintenance and school repair program.

7. Why did the Board retain outside experts for the Survey?

The Board of Education feels that people outside the community are: (a) more apt to be unbiased and unprejudiced in their judgments; (b) outside experts are often more familiar with the current practices in school administration in other communities of comparable size; (c) the Board wanted to buy the best thinking on New London school problems. In this connection, it may be well to point out that numerous Universities were approached. Included were Columbia University, Cornell, and the University of Pennsylvania. These groups either wanted more money or did not have the staff to do the job. The Connecticut State Department of Education is not equipped in terms of personnel to do the kind of job that the Board wanted. The State Department officials can be called in as individuals to make specific studies of specific problems but they cannot devote from eighteen months to two years to a single community. There are over one hundred sixty school districts in Connecticut.

8. What will the Board do with the results of the Yale Survey?

It is the legal and moral obligation of school Board members to consistently and constantly improve a school program in terms of the best education that the money of an individual city can buy. Your Board

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The Board of Education is spending \$2500 for this survey.

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8. What will the Board do with the results of the Yale Survey?

It is the legal and moral obligation of school Board members to conscientiously and continually improve a school program in terms of the best education that the money of an individual city can buy. Your Board

of Education will, therefore, study these recommendations and in its best judgment, implement them. The intelligence, confidence, and cooperation of the City Council and the Trustees of the various high schools will be necessary if the Board is to do this job to the best of its ability.

9. When will the results of the Survey be complete?

The Board is at present receiving results on individual sections of the Survey. It is releasing them to the press as the recommendations come in. The Board will use every avenue of publicity including the press, radio, Parent Teacher Associations, the New London Education Association, panel discussions before service groups, etc., to publicize the results of the Survey. Final results are expected by June, 1949.

10. Why are the final results being released in June, 1949?

University calendars are similar to public school calendars. Professors and staff members are not available in the main during the summer months. The timetable as arranged by Yale necessarily brings the results at the end of the school year. The Board feels that some aspects of the educational program in New London are of such great importance and of such long standing that there should be no feeling on any citizen's part that the Board is stampeding a judgment or forcing a decision. Careful study and gross examination of the recommendations are obviously needed both by the Board members and all civic groups before any major steps are recommended.

11. Is New London unique in having a Survey?

More and more school systems in America are being studied with an eye toward improving services and getting the most for the taxpayer's dollar. This is natural because there are more children than ever before in the public schools of America. The next ten years will find more students in the high schools and colleges than ever before in our history. Such communities as Lincoln, Nebraska; Bayonne, New Jersey; New Haven, Connecticut; Bethlehem, Pa., and Youngstown, Ohio, are but a few of the school systems alert enough to believe in planning to meet problems before problems are thrust upon them. Every large corporation is constantly surveying its personnel, its products, and its future needs. Sums of money are set aside every year for research. The New London school system has an investment of one and one quarter million dollars in elementary school buildings and over a million dollars in high school buildings. The replacement value of these buildings would be twice this amount. The annual payroll approximates one-half a million dollars. There are over five thousand students in the New London schools. The gross budget for the year 1948-1949 is nearly nine hundred thousand dollars. It is certainly wise in the minds of the Board of Education to spend less than one per cent of the total school budget to see that the ninety-nine per cent is spent wisely.

12. What does the Board of Education want **YOU** to do about the Yale Survey?

The Board wants you to:

1. Be interested.
2. Be informed.
3. Interest and inform other people.
4. Attend some group meeting where this Survey is being discussed.
5. Get group action by arranging that the results of this Survey get into the hands of your group.
6. The Board wants each group in New London to write the Board of Education office and express the majority thinking concerning necessary recommendations of the Yale Survey.

NEW LONDON BOARD OF EDUCATION

WILLIAM C. STUART, President

FREDERICK W. EDGERTON, Secretary

FRANK H. HAMLEN

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JOHN C. ALBROW, Superintendent of Schools

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The Board of Education
New London, Connecticut

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The following report is a brief statement of the findings and recommendations in reference to school management in the fields of-

1. Budgeting and Accounting Procedures
2. Purchasing and Supply Management
3. Maintenance of School Plant
4. Custodial Service

The report does not attempt to present the mass of factual data which was collected. It does not discuss at length educational theory or offer evidence in justification of each finding and recommendation. The data are accessible to the Board. The directors and consultants can be called upon readily to amplify or justify their position.

This report is for your information and study. Reports on the other problems will be presented similarly.

The special consultant on this study has been Edwin Nelson, Assistant Superintendent of Schools, in charge of business affairs, Hartford, Connecticut. He is past president of the National Association of Public School Business Officials and has served as specialist on business affairs in such surveys as Boston and Bayonne, New Jersey.

Respectfully submitted,

Clyde M. Hill
S.M. Brownell Directors

CO-OPERATIVE STUDY OF NEW LONDON
SCHOOLS

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S.M. Brownell
Directors

SPECIAL CONSIDERATIONS IN SCHOOL MANAGEMENT

Management of public school systems is similar, yet it is unlike the management of a business. Schools are not run for monetary profit. Schools can not measure success in dollar dividends. They are an investment of society in its future. Citizens generally have recognized in the past and see even more clearly today, that the coming generation needs more effective schooling than it has had in order to make democracy hold its own and compete successfully with other ideologies. Never-the-less schools have many management problems in common with business and need to employ efficient management procedures in their conduct.

Management of public school systems is a state responsibility which the legislature has seen fit to delegate to state officials selected from and by each local community. These state officials are known as school board members. They operate under laws established by the state legislature and have only such connection with the local government as directed by legislative acts in general school laws, special acts, or by legislative direction in the charter to a city. Management of public schools is thus local in character, although the board is a state rather than a municipal agency.

Management of public school systems is placed in the hands of citizens from varied walks of life who serve without pay. Usually they have full time jobs in business, industry, as homekeepers or in a profession. Usually they have made no special study of school management. These citizens make up the School Board. The power and authority for school management does not reside in these citizens as individuals. It resides in the Board as a body. Thus when the Board is not in session members have only such authority and responsibility as may have been specifically voted to them by the Board in reference to some special duty. They manage the schools by intent and by force of necessity through securing competent advice and employing competent personnel to operate the schools. The duty of the Board is to decide policies and appraise practice of the schools on the basis of evidence presented by those in whose judgment they can rely.

Management of public school systems is thus unique in a number of ways, and this uniqueness needs to be understood in appraising how schools are managed and in determining management procedures. As a large public enterprise, schools should employ the most effective business procedures, where such procedures are applicable. Because of the relationship of schools to local and state government their management needs to be responsive to the local conditions and to interests of the State at large. Since school boards must delegate the actual managerial operations of the schools to trained employees, and must decide school policies on the basis of the best advice and evidence they can secure, it is in the public interest for school boards and their employees occasionally to review the efficiency of their management. Use of competent advice from those not a part of the school staff, with a view to improving the effectiveness of the school management, is one good way to appraise the efficiency of the management.

With these points in mind the procedures of the New London Schools have been examined and recommendations are made.

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I. BUDGETING AND ACCOUNTING PROCEDURES

THE BUDGET

The determination of an annual budget is the responsibility of the Board of Education. Its preparation, therefore, should be of much concern to them, for the extent and character of the school program is shaped to a great extent by the budget.

It appears that the full burden of budget preparation has fallen upon the superintendent of schools, judging by the minutes of the Board and other evidence. The procedure, in general, is that the executive develops the budget and presents it in finished form to the Board for approval.

This does not mean that the executive does not consider the staff needs, or, that he does not reflect Board policies. There is evidence of some participation in budget preparation by the supervisory staff. Principals submit recommendations for building repairs and improvements and items of equipment changes in the educational program are discussed at staff meetings. It would seem desirable that during the stages of budget development there should be broader participation by the Board in determining the education program. As a member of another Board once expressed it, "I should like to know what you had to leave out as well as what you were able to put in."

It is suggested that in budget development major items of modification of the existing program might well be presented to the Board for individual consideration. The budget document submitted by the superintendent should be considered a tentative plan that is given careful study before it is accepted or modified.

THE FORM OF THE BUDGET

The format of the budget is good. Estimated revenues are clearly set forth. There are shown the budget allotments and estimated expenditures for the immediately preceding year and the budget and actual expenditures for the

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two prior years. Appended are analyses of fourteen of the fifty-five items which comprise the budget. There is uniformity between the budget and accounting documents.

Attention is invited to the excellent expenditure code in use. There being no uniform accounting in Connecticut school systems and the plan of the U.S. Office of Education differing from all of them, the superintendent of schools has developed a unique code by selecting the best features from several plans.

Budget weakness is found in failure to seize the opportunity to display quantitative values, such as relative teaching loads, number of pupils, units of area and cost, trends and other information. Also missing are reasons for increase or decrease in proposed expenditures. No work program is included; no statement of long term plans appears. As a result the budget loses much potential value as a document to win popular support for the school program.

ACCOUNTING

The Board of Education to a large degree imposes responsibility for the administration of the budget upon the superintendent. He is authorized to act for the Board in certifying expenditure vouchers and in initiating expenditures within the policy of the Board.

The delegation to the superintendent implies his accountability to the Board. Examination of the accounting procedures was made to see if the superintendent is provided with the necessary tools to carry out this responsibility.

Financial accounting has been delegated to the City Director of Finance. His office has recently been equipped with modern automatic punch card machinery which, among other operations, develops school payrolls and posts expenditures. The Finance Department is investigating the possibilities of increasing the usefulness of this equipment by undertaking cost accounting in greater detail

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A serious difficulty resulting from the transfer of school accounting to the City Hall is the lack of essential accounting data for school administration. Public school accounting requires more than the listing of expenditures for the purpose of providing an historical record of the schools' finances. Educational administration constantly requires up-to-date information on the exact status of the budgetary accounts. Decisions must be made nearly every day which should be influenced by the financial considerations. Without up-to-date financial facts management must grope and guess when such decisions are made.

At this time a monthly statement is prepared in the Finance Department. This statement, unfortunately somewhat out of date at its compilation, lists the expenditures, -that is, obligations which have been liquidated. It also shows approved purchase orders as encumbrances. There is no encumbrance indicated for such obligations as public utility charges or requisitions which have cleared the Board of Education office but which have not yet reached the stage of the purchase order.

This confusing situation is frequently solved elsewhere by the adoption of an accrual system. "Accrual system" is merely a technical term for the encumbrance of every obligation as it is incurred. It enables the administrator to know not only what bills have been paid but also what unpaid obligations remain.

Because the superior equipment in the City Hall it will probably not be feasible to maintain a complete set of accounting records in the Board of Education office. Study of school needs by the school and City Hall personnel could readily eliminate present difficulties and eventually perfect a system which serves needs of both city and schools.

It is suggested that daily tear sheets from the accounting equipment might

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be transmitted to the superintendent's office to take the place of the monthly financial statement. Earnings records might be posted at the time the payroll is run". It should be explained that for income tax purposes the Finance Department prepares at the end of the year a record of the earnings and deductions of each employee. Because the Board of Education must compute State retirement contributions quarterly, similar records are being prepared in that office by laborious pen and ink posting from each payroll. This duplication might be eliminated.

PAYMENT FOR SERVICE

An excellent plan has been developed for the preparation of payrolls. As a payroll is run an extra copy of the payroll sheet is made. That copy then becomes the "pre-payroll" for the next salary period. It becomes necessary only to line out any entries which do not apply to the next payroll and write in the proper facts. A new punch card is then prepared to correct the next payroll.

Responsibility for payrolls is placed on the superintendent. All substitutes are engaged by his office. This gives a check on absences which is confirmed by a monthly report from the principal. Deductions for absence are made the following month.

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II. PURCHASING AND SUPPLY MANAGEMENT

The task of delivering materials to the classrooms at such time as they are needed is important to the school program out of all proportion to its cost. Good supply management will add handsome dividends from its share of the investment in buildings, equipment and educational staff. Indifferent supply management can seriously impede an otherwise excellent school program. Because of the importance of this relatively inexpensive part of the school budget, a rather critical examination of the present system of procuring school supplies was made.

The supply needs of the elementary schools are unusually simple. Lacking well developed programs in homemaking, industrial arts, physical education, physical science, and arts and crafts, the teaching aids furnished are limited to textbooks, collateral reading materials, maps and globes and the more stereotyped classroom supplies. Possibly this is the reason for the undistinguished supply purchasing program.

Selection of Supplies - The determination of needs is delegated to school principals. Each is given an allotment for supplies and textbooks on a per pupil basis with greater amounts available for older children than for younger children. This gives the principal necessary authority for supplies in keeping with his responsibility for the success of his school.

He may requisition supplies at any time in such quantities as he requires. He is not limited in the kind of supplies he may requisition. He is not held strictly within his allotment (1945-46 expenditures exceeded the budget by 35%, 1946-47 exceeded the budget by 76%). Here we seem to have a situation which is favorable to a good supply program.

Purchase of Supplies - The superintendent acts for the Board in approving requisitions and transmitting them to the City Purchasing Agent. As requisitions pass through the superintendent's office a rough estimate of cost is made and that estimate is posted to the school's allotment. Under New Lon-

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II. PURCHASING AND SUPPLY MANAGEMENT (Cont.)

don's charter purchasing for all branches of the city government and the Board of Education is centralized in the office of the City Purchasing Agent. The advantages usually advanced for centralized purchasing are cited as the reason for including school purchasing. These are:

- (1) Closer accounting control of expenditures.
- (2) Reduction in volume of "paper work".
- (3) Reduction in overhead through reduction in personnel.
- (4) Lower unit costs.

It must be stated here that centralized purchasing in New London is contributing nothing to the efficiency of the school supply program. Some of the weakness can be traced to the absence of a school supply program in which the office of the City Purchasing Agent could participate effectively. The staff members, both school and city, handling the school purchasing are competent. A marked degree of cooperation exists between them. The basic fault lies in an unnatural requirement that a Board of Education, which has broad powers in the expenditure of monies appropriated to it, must purchase its physical needs through an intermediary agency. Because the Board of Education is not a department of the city government and because it is not subject to the same controls as city departments, none of the advantages of centralized purchasing cited above accrue.

In reference to each the situation in brief is this:

- (1) Closer accounting control of expenditures. More than 86% of the Board's budget is spent for salaries yet it is not held that the city government should engage the school staff to prevent the over-expenditure of the Board's lump sum appropriation. Disbursements for other services are also made upon vouchers authorized by the Board of Education without prior authority from the city government.

- (2) Reduction in volume of "paper work". Each requisition

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II. PURCHASING AND SUPPLY MANAGEMENT (Cont.)

submitted by the Board of Education becomes a separate purchase order. These total somewhat over 1000 a year. No consolidation of requisitions to effect reduction of paper work has been suggested. Paper work has been increased rather than reduced by centralized purchasing.

(3) Reduction of personnel. The handling of requisitions and purchase orders by both the superintendent's office and the City Purchasing Department results in duplication of work.

(4) Lower unit costs. There being no consolidation of the needs of the schools with those of city departments, no savings through pooling of purchases accrues.

Disadvantages of the Present System - The result of centralizing school purchases with those of city departments has resulted in complete decentralization of the procurement of school supplies. Each principal selects the material he requires, usually from a school supply dealer's catalog. The catalog list price is used as an estimate of cost and the particular dealer is suggested as a source. It appears that the purchasing department copies the information appearing on the requisition to a purchase order and mails it to the dealer. No shopping is done, no competitive bidding occurs, no price agreement is made, no deliver promise is exacted. The cost is not known until the dealer's invoice is received. Some charges of delay are made.

On the other hand, some purchasing is very well done. School equipment is purchased through competitive bidding and purchasing department employs superior specifications in the purchase of fuel needs.

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II. PURCHASING AND SUPPLY MANAGEMENT (Cont.)

A check was made on the prices paid for school supplies by New London because under the present system of non-competitive purchasing the way is left open for firms to charge New London higher than competitive prices. No evidence was found that New London has paid more for supply items than where competitive purchasing is used. Never-the-less the possibilities of abuse should be closed. The wise time to do it is before abuse occurs.

Recommendations for Purchasing

(1) Transfer responsibility for purchasing school supplies and equipment to the Board of Education.

(2) Develop a standard supply list. There are far too many requisitions for the volume of business done. It is recommended that the items in more common use be brought together on a standard list. Principals should then be encouraged to adhere to this list as far as practicable.

(3) Schedule semi-annual purchasing periods. If the standard purchasing list recommended above is established then the common needs can be anticipated and the requisitions consolidated periodically. A semi-annual supply requisition routine is suggested. This recommendation would permit quantity purchasing through competitive bidding. Lower prices would probably obtain but savings of greater value would result from the reduction of the volume of paper work.

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III. MAINTENANCE OF THE SCHOOL PLANT

Organization - Responsibility for the repair of school buildings, grounds and equipment and the correction of operating difficulties is divided between the Board of Education and the Public Works Department. Both initiate work projects, both employ personnel and both spend money from their respective appropriations for the upkeep of the school plant. Neither assumes full responsibility. This confusing situation results from an amendment to the city charter (passed in Aug. 1922) which transferred the repair of school buildings to the Public Works Department.

In practice, school principals submit in March recommendations for repairs and improvements to their respective buildings. The superintendent screens these requests and includes those which are feasible in his budget recommendation. However, great flexibility exists in the administration of the budget and the projects listed are not necessarily those carried out. For example, the replacement in August, 1948, of boilers in the Jennings School was not included in the budget for that year.

Supervision of repair work is delegated to the assistant supervisor of public buildings and parks to act as the representative of the Public Works Department. Some work is initiated by the filing with him of a work order by the superintendent of schools. The work order is by no means respected as an order and work requested may not be done. Other repair work is initiated by the assistant supervisor as the result of his personal inspection.

The repair projects may be assigned to a contractor. In that event the costs are encumbered against the Board of Education. Other work may be assigned to mechanics of the Public Works Department. School painting may be executed by workers temporarily transferred from the public parks. None of this labor is charged against the school budget nor does it appear as a school cost elsewhere. On the other hand, the Board of Education employs one man who is assigned to repair work. Oddly enough his work is directed by the Public

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III. MAINTENANCE OF THE SCHOOL PLANT (Cont.)

Works Department.

The result is that full responsibility for the condition of school buildings rests on nobody. There is no planning worth the name; there is no work program. Repairs are undertaken on a day by day basis rather than as an orderly planned procedure.

The recent cost of school building maintenance could not be determined. Expenditures reported to the State Department of Education over the past fifteen years are so at variance with the budget amounts in the same period that they could not be used in this report.

New London's elementary school buildings have been conservatively valued for report purposes at \$1,250,000. (The replacement value would be greatly in excess of this amount.) School administrators frequently budget 2% of the estimated value of the school plant for annual repairs. This percentage has been increased to 2 $\frac{1}{2}$ % because of the current high cost of repair work. This experience would indicate that New London should provide between \$25,000 and \$30,000 each year for normal repairs to its elementary schools.

School Maintenance Should be the Responsibility of the Board of Education

School buildings and equipment must be recognized as an ^Nintegral part of the public school enterprise. Their maintenance must have constant supervision by those charged with the responsibility of conducting the program within them. Otherwise their value to the program deteriorates through lack of vital interest by any separate board or department.

There has been wide acceptance of a principle that local Boards of Education should control and administer all elements in a system of public education because each element is essential to proper operation of all other elements. The experience of cities which have consolidated the maintenance of school plant with other governmental units has not been impressive. In the majority of cases it would appear that educational efficiency has suffered

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III. MAINTENANCE OF THE SCHOOL PLANT (Cont.)

through the combining of school business services with those of municipal government. We believe that New London should modify its city charter to make the Board of Education responsible for the maintenance of the schools. Co-operation between the Public Works Department and the schools can and should exist. Through co-operative planning and use of men or materials the same advantages sought under the present plan can be brought about.

There Should be a Program for School Repairs - It is essential that the Board of Education have in continuous development a plan for the improvement of school facilities. In addition to a long-term plan for extending and replacing school units there should be an annual plan for repairs and correction of operating difficulties which should be undertaken within the annual budget.

School buildings grow old. Information on the erection dates of New London's elementary school buildings was not available but from their design some are clearly more than fifty years old. Some have in them much of the equipment which was installed when the building was new. Some very old furniture is in use. Attempts to adapt them, to movable seats and desks by fastening them to skids have not been successful.

If the Bartlett, Harbor, Nameaug or Winthrop Schools are to be continued in use steps should be taken to relocate the basement toilet facilities. Toilet facilities should be considered in relation to pupil health. If toilets are of such a nature that they are avoided, proper health habits cannot be developed in children.

Standards for artificial light in school buildings have moved steadily upward since any of these buildings were erected. School lighting has been given much attention recently. Careful investigation is demonstrating the effects of poor illumination on school children. Apparent irrelevant conditions of health are being traced directly to faulty lighting. Unconscious eyestrain has been known to produce a series of physical disorders. A start on a lighting program has been

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III. MAINTENANCE OF THE SCHOOL PLANT (Cont.)

made. It is urged that the improvement be extended to all instructional spaces.

New London needs a comprehensive program for the modernization of its elementary school buildings. After it has been determined which buildings will be continued in use and after decisions have been made about adding elements they now lack, rehabilitation should be planned. Rehabilitation should include the revamping of heating and ventilating systems, the redistribution of toilets, replacement of drinking fountains and refinishing of floors and chalkboards. School auditoriums could have greater utilization were acoustical corrections made. The best advice obtainable should be secured on the safety requirements of the buildings.

It is recommended that decisions be made as to which buildings will remain in use for the next ten years. The present buildings are all inadequate in the facilities needed for a modern school program. There should then be planned an improvement program which would incorporate in these buildings the essentials of safety, health and comfort. For those buildings which will not be continued in use, repair with a minimum of improvement is indicated.

A later report will consider each of the buildings in reference to its location and use as part of the permanent school organization plan. The maintenance improvement program will need to be considered in relation to this later report as well.

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GENERAL CONDITION OF BUILDINGS

To indicate in a graphic manner the general conditions of New London elementary school buildings as they now stand, a chart was developed. This chart indicates the major deficiencies of each building as a structure for the housing of the present educational program. It is offered as a device for development of a comprehensive plan for the improvement of such buildings as it may seem wise to continue in use over a period of years, after studying the later report which will deal with the future organization and building needs of New London Schools.

The chart is divided into three parts, Building Safety, Health and Comfort and Major Maintenance Projects. Attention to the first two would result in improvement. Attention to the third, Major Maintenance Projects, would restore facilities to usefulness with little improvement.

Each item in each building was compared with well accepted criteria. Unless each item meets the following test, it is given a mark.

SAFETY

Fire Resistance If more than one story, it shall be of fire resistive construction or have automatic sprinklers.

Safety of Egress Adequate enclosed stairways terminating at outside exits.

Fire Stopping No vertical openings and no unprotected corridors more than 300 feet long

HEALTH AND COMFORT

Ventilation Controlled ventilation to provide clean air to pupil work areas.

Heating Uniform heat with economy of operation.

Seeing Conditions Good artificial lighting. Eventually this should be broadened to include other factors such as proper use of color and paint and attention to brightness contrasts.

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SAFETY

Resistance If more than one story, it shall be of fire resistant construction or have automatic sprinklers.

Escape Routes Adequate enclosed stairways terminating at outside exits. No openings in exterior openings and no unprotected corridors more than 60 feet long.

HEALTH AND COMFORT

Ventilation Controlled ventilation to provide clean air to pupil work areas. Uniform heat with economy of operation. Adequate artificial lighting. Excessively bright light should be provided. Include other factors such as proper use of color and paint and attention to brightness contrasts.

Plumbing Toilet, washing and drinking water facilities on each floor. Hot water to each lavatory.

Furniture Movable furniture adjustable or graded to pupil size.

Grounds A minimum of 10,000 square feet of all-weather playground adjoining the school building.

MAJOR MAINTENANCE PROJECTS

These represent the backlog of major repairs. There are not included those that should be cared for from a normal budget. Thus, while each item is large, there are not included exterior or interior painting, window shades, draperies nor any items of instructional equipment. Each mark indicates a major repair or replacement.

| | | | | | | | | |
|--------------------|---|---|---|---|---|---|---|---|
| PLUMBING | X | X | X | X | X | X | X | X |
| FURNITURE | X | | X | | | | | |
| LANDSCAPE | X | | X | | X | | | X |
| TRAINING EQUIPMENT | X | X | X | | X | X | X | X |
| PAINTING | X | X | | X | X | X | | X |
| VENTILATION | X | X | X | X | X | | | X |
| FIRE EQUIPMENT | | | | | | | | |
| SAFETY OF PERSONS | | | | | | | | |
| FIRE RESISTANCE | X | X | X | | X | X | | X |

DATE OF COMPLETION NOT AVAILABLE

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| | | REQUIRES REPAIRS | | | | | | | | |
|--|----------------------------|------------------|------|--------|----------|---------|-------------|--------|----------|--|
| | MAJOR MAINTENANCE PROJECTS | | | | | | | | | |
| | GROUND'S | | | | | | | | | |
| | HARDWARE | | | | | | | | | |
| | FLOORS - STAIRS | X | | X | | | | | | |
| | INTERIOR FINISH | | | | | | | | | |
| | WATER LINES | | | | | | | | | |
| | DRINKING WATER | | | | | | | | | |
| | TOILETS | X | | | X | | | | | |
| | HEATING SYSTEM | | | | X | | | | | |
| | BOILERS | | | | X | | X | | | |
| | EXTERIOR BRICKWORK | | | | | | | X | | |
| | ROOF | | | | | | | | | |
| | HEALTH AND COMFORT | | | | | | | | | |
| | GROUND'S | X | X | X | X | X | X | X | X | |
| | FURNITURE | X | | X | | | | | | |
| | PLUMBING | X | | X | | X | | | X | |
| | SEEING CONDITIONS | X | X | X | | X | X | X | X | |
| | HEATING | X | X | | X | X | X | | X | |
| | VENTILATION | X | X | X | X | X | | | X | |
| | SAFETY | | | | | | | | | |
| | FIRE STOPPING | | | | | | | | | |
| | SAFETY OF EGRESS | | | | | | | | | |
| | FIRE RESISTANCE | X | X | X | | X | X | | X | |
| | DATE OF CONSTRUCTION | | | | | | | | | |
| | | Bartlett | Hale | Harbor | Jennings | Nameaug | Saltonstall | Waller | Winthrop | |

GENERAL COMMENT

Fire Resistance - Six present elementary buildings cannot be considered of adequate fire resistance in terms of what is commonly accepted as good practice today. If they are to be retained in use serious consideration must be given to the removal of all potential fire hazards and the building in of all possible fire safety.

Safety of Egress - New London has done a creditable job of providing safe egress situations. Stairways lead directly to the outside from each classroom floor. Stairwells have been screened from the surrounding area with metal covered doors and anti-panic hardware appears in serviceable condition. The State Fire Marshal is now developing a Fire Safety Code to govern school buildings. When it is promulgated steps should be taken to obtain an immediate inspection by the local Fire Marshal to discover any cases of non-compliance.

It should be noted here that there is now in effect a Fire Safety Code governing places of assembly. School auditoriums are places of assembly as defined by that code. Immediate steps should be taken to meet State fire requirements as they affect places of assembly.

Fire Stopping - It is good practice to have no vertical openings between floors nor any large horizontal / ^{areas} which might encourage the spread of fires within buildings. No conditions were observed that require attention at this time.

Ventilation - At one time New London schools had positive mechanical ventilation. Many of these have been removed and others are no longer used. It appears that the responsibility for ventilating classrooms is being forgotten.

Heating - The boiler plant, except at Jennings and Saltonstall, appear in good condition. It is understood that the Jennings boilers will be replaced before the beginning of the next heating season. The heating equipment at all schools is given an adverse report because of the lack of any method of

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GENERAL COMMENT (Cont.)

controlling classroom temperature. It is not possible to provide uniform temperature without special provision. While the school buildings were not visited during the depth of the heating season, it would appear that serious overheating of some classroom spaces is possible.

Seeing Conditions - There has been marked improvement in seeing conditions in a large number of classrooms. Every effort should be made to continue this program. Those schools being given a deficiency in this area have had less improvement than some others.

Plumbing - The deficiency here is in the continuance of pupil toilet facilities in basements.

Furniture - Marked improvement has been made in the replacement of old, fixed, non-adjustable furniture with modern, movable equipment. It is urged that this program be continued.

Elementary School Grounds - Almost completely undeveloped. Not only should safe play surfaces be provided but it is also possible to make school grounds a model of attractiveness for the neighborhood.

Repairs - The condition of repairs is surprisingly good when it is considered that we are coming out of a period of wartime scarcity of men and material and a prewar scarcity of money. Roofs appear in serviceable condition. Exterior brickwork, except at the Waller School, appears weathertight. Steps are being taken for repairs to boilers during the present summer recess and many of the more important repairs are receiving attention. Interior finishes in many cases are bright and attractive. Good use has been made of color in improving classroom environment. Interior plaster appears in good condition. There are some cases, notably at Bartlett, of splintery floors which should be covered with a resilient floor covering.

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Classroom Conditions - There has been marked improvement in seating conditions in a large number of classrooms. Every effort should be made to continue this program. These schools rating given a deficiency in this area have had less improvement than some others.

Lighting - The deficiency here is in the continuance of pupil toilet facilities in basements.

Furniture - Marked improvement has been made in the replacement of old, fixed, non-adjustable furniture with modern, movable equipment. It is urged that this program be continued.

Necessary School Grounds - Almost completely undeveloped. Not only should play facilities be provided but it is also possible to make school grounds a model of attractiveness for the neighborhood.

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IV CUSTODIAL SERVICE

The custodial staff is a small group of earnest men and women who seem to be giving their best effort toward keeping their buildings warm and clean. Morale is high. They have attended in-service training courses arranged by the State Department of Education. They do, however, labor under the handicap of insufficient direction.

The present rules of the Board of Education indicate that the Board has accepted the responsibility for custodial service. Until a few years ago this service, like other school business services, was directed by the city government. Some of the municipal direction still remains. The assistant supervisor of public buildings and parks, an employee of the Public Works Department, arranges for the coverage of absences. He also requisitions supplies needed by custodians. Responsibility is further confused in the care of school grounds. In the matter of snow removal, custodians state that they are responsible for clearing the doorways but not the walks. The Public Works Department stops at the street sidewalks. After a heavy snowfall it is difficult to get into a school building. During other seasons of the year grounds are largely unattended.

School Custodial Service Needs Competent Direction - One of the more apparent advances made in public schools in the last generation has been the improvement in the school environment. Today school buildings are built that set a standard in the community for attractive, efficient work places. More space and equipment is provided for each pupil. The simple, hand operated mechanical parts of the building are giving way to expensive electrical equipment.

The school janitor has become a Custodian. Greater demands on the school have placed greater responsibility on him. He must now carry a considerable share of the responsibility for care and protection of valuable property and its economical operation. He must accept a large part of the respon-

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sibility for the safety, health and comfort of the pupils and teachers and he is an important factor in public relations by his attitude, his appearance and his work. All of this requires direction and supervision.

The rules of the Board of Education properly assign the supervision of custodians to the school principal and the superintendent of schools. Good organization requires that the principal be responsible for the effectiveness of all activities within his building. But there also should be overall direction of the custodial service. The difference in the quality of housekeeping observed at the various schools can probably be traced to the difference in the degree of interest individual principals display or the work load. As presently organized, a principal may have about as clean a building as he demands. No uniform standards for frequency have been adopted; no clear understanding prevails as to the extent of a custodian's duties.

The custodial work load is unevenly distributed. Bartlett, Jennings and Winthrop, for example, are quite large school buildings to be cared for by one man each. When it is considered that most of his cleaning must be done outside class hours, that early morning heating duties are required and that other services are required of the custodian during school hours, a day must be long indeed if he is to give his entire building attention every day. All these buildings require the services of more than the one man now assigned to each. Probably none of them will require the fulltime service of two men. This is a type of management problem that must have the attention of someone directly responsible to the superintendent of schools. With school buildings located as close together as in New London additional men might serve in more than one school.

Another factor which presents a barrier to good custodial service is outdated and worn facilities. Where new toilet rooms have been installed they are found in immaculate condition. The older basement toilet rooms are not so clean. Where new floor coverings have been installed there is evidence of good custodial care; unfinished wood floors get a superficial sweeping.

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well cared for. Where new floor coverings have been installed there is evidence of good
maintenance; old floors get a superficial sweeping.

Fire Inspection - The custodian's part in fire prevention and safety should have more attention. Accumulations of obsolete furniture in basements should be removed. Definite routines for inspection should be established. One routine commonly employed elsewhere is a monthly inspection by the principal of the school, the custodian and a member of the fire department, using a blank form supplied by the National Board of Fire Underwriters. At present the only check seems to be an annual inspection by the fire marshal.

School Heating - The common method of heating these buildings is with low pressure steam generated in cast iron boilers. Some replacement of boilers was done ten years ago, others are being replaced this year. The advantages of low pressure steel boilers should be considered, particularly in the reduction of insurance costs and the ease of repairs.

Fuels now used are Buckwheat anthracite, run-of-mine bituminous and light fuel oil. Ashes are removed from the schools by the Public Works Department. Further consideration should be given to the installation of oil burning equipment to reduce the hours of custodial labor on furnace care and make more time available for other custodial services. It is unfortunate that decision was made to install coal burning equipment in the Jennings School Boiler replacement this summer.

Custodial Facilities - Every custodian should have space set aside for him where he may store his supplies, do the repair work required of him and keep his records. There seems adequate space at the other schools to provide facilities such as those found at Nathan Hale and Harbor.

Methods of Cleaning - Specialists in school custodial service agree that a school presents an attractive interior appearance if the following have had recent care: (1) Floors, (2) Windows, (3) Lighting Fixtures, (4) Walls and Ceilings, (5) Furniture and Fixtures. A visitor's impression is unconsciously gained in about that order. That is, an untidy floor will register first; untidy or dusty furniture is likely to escape his notice.

Inspection - The custodian's part in fire prevention and safety should receive attention. Accumulations of obsolete furniture in basements should be removed. Definite routines for inspection should be established. One commonly employed elsewhere is a monthly inspection by the principal or school, the custodian and a member of the fire department, using a blank card supplied by the National Board of Fire Underwriters. At present the only inspection seems to be an annual inspection by the fire marshal.

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Floor care is not uniformly good. There is evidence that at one time the administration had a good understanding of floor care and maintenance. Many wood floors had been sanded and refinished with a penetrating seal. This program has been permitted to lapse.

Floor care is a continuous problem. Wood floors should be refinished by custodians during school vacations. Marked improvement in appearance will result and the custodian's daily care will be easier. The use of treated cotton mops should be considered.

Windows and lighting fixtures were, in most cases, clean at the time of inspection. The problem of window cleaning is particularly difficult at some schools because of the use of storm windows. These are probably necessary because of New London's exposed seacoast location.

There seems to be little washing of walls and ceilings. This is probably the result of a decision that repainting is necessary. A good oil paint, such as is now used in the present repainting work, will stand five or six semi-annual washings before new paint is required. If a large repainting program is not contemplated, walls and ceilings can be greatly improved by washing. Inexpensive mechanical equipment is now available which makes a pleasant experience out of an otherwise disagreeable chore.

The general impression gained by a visit to the school buildings in March, 1948, and again during the summer, was that school building housekeeping was rather good. Very few instances of careless work were observed; some work was very well done.

Major recommendations are that someone responsible to the superintendent be appointed to assist him in overall direction of this work, that schedules for frequency of cleaning be adopted, that custodial work loads be made more uniform and that some modernization of the cleaning techniques be attempted.

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New London's Schools

The Pattern of Organization

All of the activities of a school system, instruction, administration, supervision, finance, the operation and maintenance of buildings, special services and the plan of organization exist for one purpose, to provide a sound program of education at a reasonable cost. The real starting point, therefore, in any discussion of the improvement of school organization is the kind of educational program the people need and want.

This report will not consider in any detail what these wants and needs may be in New London for two reasons. The report on secondary education in New London will deal at some length with this question. It was a part of the agreement when the Co-operative Study was undertaken that the elementary school program was not to be included.

It is perhaps ambitious to attempt to state briefly what should characterize a desirable educational program today, since many whole books have attempted to outline programs that on the surface seem to differ a great deal. However, for the most part, they agree in principle. They vary chiefly in emphasis and in procedures, so that it seems fair to believe that general agreement would be accorded this statement of function of today's educational program: "It is the function of the public school to provide an adequate educational opportunity for every child from the time he enters the school until he is ready to take his place in adult society."¹ It is also probably fair to indicate that there would be general agreement at least on the following as being characteristic of an adequate educational program today:

An adequate educational program includes:

1. A social studies program which includes the acquisition of knowledge,

¹ Office of Education, Bulletin 1938, No. 11

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1. A school program which includes the acquisition of knowledge,

attitudes, skills and habits, in social living that fits youth to take an effective part as a citizen in American democracy.

2. A health and physical education program that provides the information, attitudes and conditions leading to good personal and community health, periodical examination for all children, corrective treatment for those who need it, recreation and play facilities, and guidance in healthful living.
3. Mastery of the common knowledges and skills basic to learning, thinking and expressing thought and feeling that are needed by all persons.
4. Adaptation of the program to the varied needs of individual children. This will mean special adaptations for children who may be in any way socially, mentally, or physically handicapped, and corresponding adaptation of the program to the needs of those children who are especially talented. It will include emphasis on scholarship commensurate with capacity for achievement.
5. Attention to development of appreciations, abilities and expressions through the creative arts.
6. Opportunity for learning through manual activity such as offered in practical arts for the younger children and industrial, agricultural, commercial and household arts for the older children.
7. For the older children, prevocational studies leading to later specialization in skilled trades, and vocational preparation at the lower levels for those who must seek employment at the close of the secondary school period.

Other characteristics might be added, but these are perhaps enough to call attention to the fact that an adequate educational program today requires more thoroughgoing instruction than in the past; it is much more than studying assignments in books, giving recitations on the assignments, and writing compositions. It must include what are frequently called the three R's, health and hygiene, geography, history, civics and other social studies, literature, oral and written English, nature study and elementary science, art, music, dramatics, safety, conservation, and physical education. It must also provide experiences in playing and working together, working out problems of school citizenship, and otherwise practicing many kinds of social and civic behavior.

II Facilities Required

Teachers and pupils living and working together can carry out the desired educational program provided they have the necessary facilities - the kind of

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II Facilities Required

Teachers and pupils living and working together can carry out the desired educational program provided they have the necessary facilities - the kind of

organization, supervision and services that aid them and a good place to work, adequate equipment and materials.

A. Special Services. It is now generally recognized by educators that to carry on an adequate educational program the following specialized services are needed:

1. Administrative services. The over-all management and co-ordination of the school program requires leadership of a high order. The superintendent of schools, with assistance in the special areas mentioned above and those discussed in the report on school management, serve as agents to free the teacher to work with pupils more effectively than would be possible if the teacher had to work alone.

With a Board of Education that serves to represent the local citizens in deciding what policies shall guide the school program, the superintendent serves as the co-ordinating executive of the school system.

2. Supervision and Instructional Improvement. The need for the supervision of teachers is often not fully understood by the public. It is frequently assumed that teachers are highly trained professional people, who therefore need no further direction. Actually no profession is, or can be, learned solely in professional schools. Professional school training can lay a sound foundation which enables persons to make a good beginning in their field, but the art of teaching like that of law or medicine must be acquired through experience of years on the job. This development of skill on the job is just as important to effective teaching as the pre-service training given by the professional school. If it is to be acquired economically the help of technically trained supervisors must be made available. Without such assistance the teacher goes through a period of trial and error expensive alike to her and the children whom she serves - and only by chance does she achieve her highest level

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of teaching effectiveness.

Furthermore, society requires of the school new developments to meet its changing needs and teachers need leadership and assistance in keeping up with these changes. Education, also, is rapidly advancing in its background of scientific information and consequently in its techniques. The advancement by leaps and bounds of knowledge of child growth and development in the past two decades is a good illustration of this point. Supervision and leadership in continuous improvement of instruction are necessary, not only to make available to the teacher the latest findings of research and educational literature, but also to focus the rich knowledge and experience of the specialist directly on many problems which teachers face. Good supervision and leadership in the improvement of instruction are the most economical means that have yet been devised to insure continued growth in the quality of teaching service.

3. Attendance, Guidance and Adjustment Service.

Attendance service

extends beyond responsibility to enforce the compulsory attendance law. Basically its purpose is to see that all children secure the education to which they are entitled. It should discover the causes of non-attendance and exert effort to see that they are removed, thus supplementing the work of the teacher in maintaining an improving attendance. It should be the agency which studies enrollment, attendance and census trends as an aid to foreseeing how many pupils will be attending schools, so that the schools will be ready for the. It should work closely with homes where there are attendance problems. It should be closely integrated with health services, guidance, psychological services and all community agency programs designed to assist children in meeting their problems. Attendance, guidance and adjustment service if effectively conducted can

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There are many children who attend schools, however, who have difficulties requiring special attention. These may be personal, e.g. adjustment to school, companions, or to the difference in behavior expected at home and school. They may be physical, social or emotional difficulties, or they may be concerned with the wise choice of an occupation. Aid to pupils in avoiding or in meeting these difficulties constitutes the guidance service of a school.

While the teacher must of necessity play a large part in guidance, she cannot be expected to render fully effective guidance service without the assistance of specialists, trained in guidance techniques, to carry on parts of the program. As needs arise, the services of such specialists as psychologists, psychiatrists and others trained in dealing with special problems also are needed in working out group and individual adjustment situations.

4. Health Services. Every statement of educational objectives invariably stresses the importance of insuring the information, habits and attitudes essential to healthful living. The realization of this objective requires not only a strong health instructional program, but certain health services as well. These include:

- a. Periodical examinations to discover those pupils who need special attention with respect to health problems. The Connecticut State Education Law requires that each pupil be given such an examination every three years.
- b. A follow-up program to care for defects discovered by the examination. This requires medical and dental service for pupils not provided for otherwise.
- c. Nursing service designed to afford supervision of the general

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- c. Nutritional service designed to afford supervision of the general

health condition of the pupils and cooperate with the follow-up program.

d. Preventative measures and control of contagious and infectious disease.

e. Hot lunch service for children who eat at school.

5. Services for Handicapped Children. It is estimated that between 8 and 12 per cent of the school enrollment have handicaps sufficiently serious to require special attention. These include auditory, visual, cardiac, orthopedic, epileptic, speech, mental and psychiatric deficiencies. Unless handicapped children are helped to surmount these defects and develop as fully as possible resources for a satisfactory life they tend to become permanent liabilities to society.

6. Transportation. Children not within reasonable walking distance of the school and those with physical handicaps need to have safe, convenient transportation to and home from school.

7. School and Community Libraries. Modern education requires resources for cultural and vocational information, reference material for study and research, and books and magazines for reading for pleasure far beyond schools of earlier days. These resources for learning require supervision and organization by a trained ^{school} librarian if they are to be most effectively used and readily available. School and community libraries need to be in close working relationship so that both may be vital educational forces in both school and community.

8. Adult Education. No longer can a school system consider itself to be an agency to meet the educational needs of children alone. Youth and adults have many needs that can best be served through use of school facilities. A program which includes guidance and counseling service for youth and adults, health information and advice, recreation, vocational training and retraining, cultural programs, academic courses, Americani-

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for youth and adults, health information and advice, recreation, vocational

training and retreating, cultural programs, academic courses, American-

ization, community forums and discussions, is characteristic of a modern educational program of any city. How much of this should be done in and given community will depend on community needs and the leadership available.

B. Buildings and Equipment.

Generally accepted building and equipment facilities for schools have been summerized in 'American School Buildings, 27th Yearbook of the American Association of School Administrators, 1949. The features indicated as essential are noted in the brief statement - "Do Your School Buildings Pass this Test?"

Curriculum Adequacy -- Do they provide the space and facilities for the educational program that your community needs for its children, youth, and adults?

Safety and well-being -- Do they not only protect against danger but also provide a positive influence for improving the health and physical welfare of the pupils?

Interfunctional coordination -- Are they so planned that the activity in each part of a building may be coordinated harmoniously with related activities and may be carried on effectively without disturbing other activities?

Efficiency and utility -- Are they so planned that the handling of materials and the comings and goings of pupils, school staff, and the public are accomplished with a minimum of interference and a maximum of ease and satisfaction to all concerned?

Beauty -- Are they pleasing in appearance, with simplicity, usefulness, and balance as ideals, rather than ornamentation or symmetry?

Adaptability -- Are they so planned that they can be enlarged or rearranged internally to meet new educational demands with a minimum of additional cost?

Economy -- Are they so planned that in original outlay and in future operation the utmost in educational utility can be secured for every dollar spent?

These are generally in line with the U.S. Office of Education, Bulletin 1938, No. 11, which gives the following recommendations relative to standards for school buildings:

1. School buildings should be planned from a functional point of view;

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Interfunctional coordination -- Are they so planned that the activities in each part of a building may be coordinated harmoniously with related activities and may be carried on effectively without disturbing other activities?

Efficiency and utility -- Are they so planned that the handling of materials and the carrying and moving of pupils, school staff, and the public are accomplished with a minimum of interference and a maximum of ease and satisfaction to all concerned?

Beauty -- Are they pleasing in appearance, with simplicity, usefulness, and balance as ideals, rather than ornamentation or gimmicks?

Adaptability -- Are they so planned that they can be enlarged or rearranged internally to meet new educational demands with a minimum of additional cost?

Security -- Are they so planned that the original layout and its future operation and utmost in educational utility can be secured for every dollar spent?

These are generally in line with the U.S. Office of Education, Bulletin 1935, No. 11, which gives the following recommendations relative to standards for school buildings.

1. School buildings should be planned from a functional point of view.

that is, they should be built with definite educational services in mind.

2. The building should be arranged and constructed so as to be free from fire and accident hazards. It should be properly lighted, heated, and ventilated.
3. The building should be equipped in such a manner as to make possible the maximum of health, safety, and instructional efficiency of both pupils and teachers.
4. The school site should be easily accessible, well-drained, free from hazards to health and safety, free from disturbing noises, and should have ample playground facilities. There should be a minimum of one acre for each 50 pupils, and a minimum of five acres for any school having 250 or more pupils.
5. If by alterations or additions present school buildings can be made to meet the standards set up, then remodeling should be considered. Otherwise, new buildings located on suitable sites should be recommended.

The Connecticut Public School Building Survey (1948-59) adds the following specific considerations for elementary schools.

1. Every community where population density makes it at all feasible should offer an elementary program from and including the kindergarten through grade six. This may vary from Kindergarten to grade six or kindergarten to grade eight or nine depending upon the local situation and the secondary school "set-up" within or available to the community.
2. No reasonable modern program of elementary education can be carried on that places many more than thirty children in one average classroom at any one time.
3. All children have a right to safe, clean, sanitary, and otherwise healthful school environment. Standards set up in School Building Code, Conn. State Board of Education, 1941, have generally been adopted.
4. Any suitable elementary program must have facilities for pupil health and pupil and community school activity programs. The committee does not envision the facilities required for the ultra-modern "progressive" school as a state sponsored minimum program. That can't be done on a 30 pupil per classroom housing unit basis. On the other hand, the committee does not believe that the State of Connecticut is so poor or so lacking in educational support as to wish the development of an elementary program limited to mass instruction of only the three "R's".
5. School buildings must be flexible to allow for continued use in a pattern of changing educational curricula and programs. Since a well-planned and well-built plant may last for seventy-five years, its continued use will depend entirely upon its suitability and adaptability to educational progress.

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III. The Present Organization of Services in New London Schools

The New London Public School System consists at the present time of eight schools with enrollments as follows:

| | | |
|-------------|-------|------|
| Bartlett | K - 5 | 454 |
| Nathan Hale | 5 - 6 | 99 |
| Harbor | K - 8 | 601 |
| Jennings | 7 - 8 | 462 |
| Nameaug | K - 6 | 417 |
| Saltonstall | K - 6 | 319 |
| Waller | K - 3 | 191 |
| Winthrop | K - 6 | 445 |
| Total | | 2988 |

In these schools elementary education is provided through the eighth grade.

A. Administration. The Board of Education has adopted a set of rules and regulations, under which the Board "shall act as a legislative body in the determination of general policies for the control, operation and maintenance of the public schools, the details of which shall be the responsibility of the administrative staff".

The superintendent of schools is the chief executive officer of the Board with general supervision and direction of all personnel of the school system. He is responsible for carrying out Board policies; advises the Board on the conduct and needs of the schools; makes recommendations on all professional matters, including text-books, supplies, courses of study, building programs and the budget. He nominates, assigns and transfers teachers and other employees subject to the approval of the Board of Education if a change in rank or salary is involved. He is responsible for classroom supervision, keeps records, certifies payrolls and vouchers to the City Treasurer for payment and represents the Board in all public relations.

The line of authority from the Board to the principals, teachers, secretaries, janitors and other employees is clearly defined. In general the rules and regulations represent accepted administrative practice in the educational

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| | |
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| Harvard K - 5 | 454 |
| North Main K - 5 | 22 |
| Harbor K - 5 | 201 |
| Denmark K - 5 | 123 |
| Kennerly K - 5 | 117 |
| Belmont K - 5 | 210 |
| Walter K - 5 | 121 |
| Lincoln K - 5 | 225 |
| Total | 1083 |

In these schools elementary education is provided through the eighth grade.

Administration

The Board of Education has adopted a set of rules and regulations, under which the Board itself acts as a legislative body in the determination of general policies for the control, operation and maintenance of the public schools. The details of which shall be the responsibility of the administrative staff.

The administration of schools is the chief executive officer of the Board in general supervision and direction of all personnel of the school system. It is responsible for carrying out Board policies, advising the Board on the subject and needs of the schools; making recommendations on all professional matters, including textbooks, supplies, personnel of staff, building programs and the budget. It is responsible for the maintenance of records and other matters subject to the approval of the Board or the Board in the event of a change in personnel. The Board is responsible for the financial administration of the schools, keeps records, certifies payroll and vouchers to the City Treasurer for payment and presents the Board in all public matters.

The lines of authority from the Board to the Principals, teachers, clerical, janitors and other employees is clearly defined. In general the rules and regulations governing administrative practice in the educational

aspects which they cover. The business administration is treated in the report of another committee.

Quarters have been provided for the Board and administrative staff on the second floor of Nathan Hale. These are bright and airy. Ample space is provided for the secretarial staff and the records. Adjacent is the office of the superintendent and also a large-sized room which houses the professional library, affords good facilities for committee meetings, curricular revision work, and Board of Education meetings. Facing this suite of offices is the auditorium of the school which is available for teachers' meetings, hearings and other meetings of citizens.

The superintendent is the only administrator working out of the central office. Each school, with the exception of Waller, has a full time principal. The principal is regarded as the responsible head of his school. He supervises teachers and all employees in his school, the buildings and grounds, makes reports, administers the curriculum, discipline, attendance, books and supplies and public relations in his community.

B. Supervision and administration is largely carried on by the superintendent and the principals. The quality of the teaching service is evaluated by the use of standard tests in addition to observation by superintendent and principals. The latter are estimated to spend about 30% of their time in this field. In-service training is provided through "work-shops", visiting days, summer extension work, fairly regular teachers' meetings within the individual buildings, curriculum revision committees and the professional standards committee, composed of one teacher from each school and one principal selected at large, who meet with the superintendent.

Curricula have been developed largely by committees of teachers and principals working either under their own power or in connection with study groups conducted by nearby college or teacher training institutions. A curriculum

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C. Other Services.

1. In the system as a whole, special teachers are provided as follows: two in art; two in music; four in physical education. These special teachers meet the pupils about once a week. A reading consultant is provided to help teachers aid pupils who have reading difficulties. She also administers the standard testing program.
2. The attendance officer enforces the attendance law and is also responsible for the school census. In the discharge of his duties he makes use of the Juvenile Court, Connecticut Children's Aid Society, Associated Charities and the police department.
3. Health services are furnished by the Board of Health. There are three full time nurses. As required by law each pupil is given a medical examination once in three years. Their teeth are cared for by a full time dental hygienist and a dentist who devotes 15% of his time to the schools. One school, Jennings, supplies a hot lunch at noon. After school recreation is provided in four of the school playgrounds from 3 to 5:30 P.M. as neighborhood centers.
4. Beginning with this year some guidance service has been provided the seventh and eighth grade pupils at Jennings School. One teacher teaches two periods a day and spends the remainder of her time in

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guidance. She is preparing for this work through courses at Yale.

5. Handicapped children. New London is making provision for the mentally handicapped with a class for children in grades 1 - 4 in Nameaug, Saltonstall and Winthrop schools and for grades 5 - 6 in Nathan Hale. A part time psychologist is provided by the school system and the State furnishes a psychiatrist who makes periodic visits. A full time teacher is provided for homebound children two-thirds of whose salary (not to exceed \$200 per pupil) is reimbursed by the State. For those children with defective vision, hearing, cardiac conditions, orthopedic or speech defects, the local school depends upon what help is afforded by specialists from the state.
6. Libraries. Six of the schools have their own central libraries but the amount of library service varies because of lack of room space
7. Audio-visual Aids. Each school has a radio and wire recorder. Two schools have sound motion picture machines and the system is building up a film library. The central library handles the servicing of visual materials, furnishing any of its material to any teacher who requests it together with a motion picture machine and operator.
8. Adult Education. The system offers a program of adult education including academic, cultural, citizenship and vocational courses in addition to classes in Americanization. It is prepared to offer any subject for which there is sufficient demand and for which competent teachers can be obtained. A radio program for the discussion of various phases of the school program has recently been started.

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IV. The Adequacy of Special Services

A. Administration.

The rules and regulations of the board of education while simple seem to be fairly adequate. The allocations of functions between the board and the administrative staff are sound. They make the board the legislative and policy making body and delegate the administration of their policies to the administrative staff. The relation of the superintendent as executive officer of the board is good practice. The line of authority from the board to the principals, teachers, secretaries, janitors and other employees is clearly defined. The rules and regulations conform to the generally accepted pattern of organization in the educational aspects which they cover.

B. Supervision

So long as the schools are confined to the first eight grades the present provision for supervision by a superintendent and for each building a full time principal, 30% of whose time is devoted to this field, supplemented with a sound program of standard testing is adequate. If the system broadens out to include secondary education as a part of the superintendents responsibilities the addition to the corps of a well-trained supervisor of curriculum or instructional improvement would certainly be a sound investment.

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could be justified or so that their duties could be materially altered.

C. Attendance, Guidance and Adjustment.

Attendance is apparently well handled under present conditions, but needs to be more closely tied in with the developing guidance and adjustment program. The beginning of a program of guidance at Jennings School this year is highly commendable. It seems to have got off to a good start. But whether New London goes into a junior high school organization or continues to operate the seventh and eighth grades as part of the elementary school, guidance should be considerably expanded to serve the needs of its young adolescents. It should be extended to include these children now at Harbor School as soon as conditions permit. In addition it must not be overlooked that the children of the first six grades also present problems in the solution of which an adequate guidance program would be very profitable.

D. Health

In general health needs seem well cared for. In view of the importance of health services to any sound program of education two questions of adequacy may well be raised.

a) Since close cooperation between home and school is so vital to adequate health service, are three nurses sufficient to cover all the needs of the eight schools of the system with the very considerable amount of home visitation involved?

b) Are present provisions for hot lunches adequate? It may be questioned whether the assumption that with the exception of Jennings School all children live so close to the school that they can easily go home for lunch. It can be questioned whether the present provisions for hot lunch at Jennings are adequate for the children of that building and neighboring schools.

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E. Services for Handicapped Children.

Consideration may also well be given to an expansion of the services to the handicapped children. The program for the mentally handicapped seems reasonably adequate through the first six grades. It should be extended through the seventh and eighth. In a city as generally compact as New London where distances are not great, the system might well consider concentrating more of the services to the handicapped in Nathan Hale School. There is no doubt that a much richer program of handwork together with a better grading for academic work can be provided for less money in a single building than when scattered throughout the city. The increased service would of course have to be balanced against any possible social loss due to taking children out of their home districts. The decision must finally rest on whether the children - normal as well as handicapped - are likely to profit most by the program that is offered to the handicapped wherever it is carried on.

The provision for the home bound with a full time teacher in charge seems quite adequate. Dependence on the state specialists for help with children suffering from defective vision, hearing or epileptic and psychiatric conditions is not adequate to the needs of these unfortunates. It is probably all that can reasonably be expected at this time. The incidence of these defects is too small to warrant attempts to set up classes for them in a city the size of New London. Efforts to improve this service need to be explored, with special consideration to developing regional services in cooperation with neighboring school districts.

In the case of speech and orthopedics, however, another situation exists. Here studies show the incidence is almost as great as for mental deficiencies. Approximately two percent of the school population is included in each case. Now that the physical education services have been reorganized with a coordinator in charge something might well be undertaken in the field of correctives.

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The physical education teachers have undoubtedly had some instruction in this field as a part of their pre-service training. They would probably need some refresher courses either during the year or in the summer. The cost of the necessary apparatus is comparatively low. A local orthopedic physician could select those pupils who would profit by the limited training which the school could offer and with relatively little outlay a real beginning could be made which could be expanded as experience warrants.

In like manner a study of the needs of children for remedial work in speech should be instituted. The teachers, themselves, are undoubtedly conscious of a considerable number particularly among the younger children who need this type of assistance. It is possible that the services of the reading specialist might be enlisted to make a small beginning. But as soon as possible a teacher specially trained in speech should be added to the corps. She would prove a sound investment through her assistance in the prevention of personality difficulties as well as pupil failures that frequently develop as a result of reading and speech problems.

Adult Education

The adult education program is a highly commendable feature of the educational services of the school system.

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F. School Library Service

The library service is quite inadequate to meet the standards of a sound program of modern education. Modern education uses not a single text book but many books. So important is this service that the library is often called the heart of the school. The generally accepted standard calls for \$1.00 per pupil per year for new books. These should be housed in a room equipped for reading purposes and provision should be made for training children in finding and using both reference and study materials and in reading for pleasure. Assistance is being obtained from the city library in setting up school libraries and in the selection of proper material for children's use. In some systems to avoid the expense of a trained librarian in each school, children from the sixth grade are used to keep the library in order and teachers assume as a part of their responsibility taking their classes to the library at stated periods and teaching them how to use library facilities. Some adaptation of this program might well be considered for New London.

G. Adult Education

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The adult education program is a highly commendable feature of the educational services of the school system.

IV. The Organization of the Pupils

The plan of organization of any school system is important because it can and does influence the kind and quality of instruction of pupils, and the cost with which it is provided. This is true of the organization of pupils for instruction, of the administrative organization of the school system and the organization of the activities of those who work in each school building. But there is ever need to keep in mind that organization is but a means to an end and not an end in itself. Thus, in deciding the plan of organization it is important to consider what are some of the features of the school that can be influenced by the organization plan.

- a. Continuity of educational experience of pupils as they progress from kindergarten on through their school career should be fostered and maintained.
- b. Group experiences should be provided in order to aid in the social development of pupils, but there is also need to provide for attention to individual needs.
- c. The differing needs of early and later childhood, and of early and later adolescence should be recognized.
- d. Transfer of pupils from one school to another should be possible for children without undue difficulty.
- e. The size of the school should contribute to economy and efficiency in the use of facilities.
- f. Use of the existing physical plant should be made to a maximum, compatible with the safety and best educational needs of pupils, and with long term economy.
- g. School location should be as convenient as possible to pupils and and their parents, consistent with efficiency of instruction and financial economy.
- h. Possible hazards to pupils in getting to and from school should be considered and the school organization should be so planned that such hazards are reduced to a minimum.
- i. Relative stability should be sought in establishing a plan of school organization.

The adequate educational program should be conceived as a continuous development for the child throughout his entire school career. The scope

IV. The Organization of the Pupil

The plan of organization of any school system is important because it can influence the kind and quality of instruction of pupils, and the cost with which it is provided. This is true of the organization of pupils for instruction, of the administrative organization of the school system and the system of the activities of those who work in each school building. But it is ever need to keep in mind that organization is but a means to an end and in itself. Thus, in devising the plan of organization it is not to consider some of the features of the school that can be influenced by the organization plan.

Continuity of educational experience of pupils as they progress from kindergarten on through their school career should be fostered and maintained.

Group experience should be provided in order to aid in the social development of pupils, but there is also need to provide for attention to individual needs.

The differing needs of early and later childhood, and of early and later adolescence should be recognized.

Transfer of pupils from one school to another should be possible for children without undue difficulty.

The size of the school should contribute to economy and efficiency in the use of facilities.

Use of the existing physical plant should be made to a maximum compatible with the safety and best educational needs of pupils, and with long term economy.

School location should be as convenient as possible to pupils and their parents, consistent with efficiency of instruction and financial economy.

Possible hazards to pupils in getting to and from school should be considered and the school organization should be so planned that such hazards are reduced to a minimum.

Relative stability should be sought in establishing a plan of school organization.

The adequate educational program should be conceived as a continuous effort for the child throughout his entire school career. The scope

of the public school program essential to modern American children and youth begins not later than kindergarten for children 5 years old and extends through grade 12 for youths 17 to 18 years old. For convenience of organization it may be divided into elementary school for pre-adolescent children and secondary for adolescent children. Actually there is no hard and fast definition of the elementary school. Although the 8-year elementary school is still the prevailing practice in Connecticut, as in fact, in many if not most other states, the most recent practice which is becoming increasingly accepted throughout the United States as the desirable pattern, is to consider the elementary as including the kindergarten and grades 1 to 6.

The 7th and 8th grades deal with children who are entering the period of adolescence, a period in which the individual undergoes significant changes in his physical and mental development, and in his social outlook. In consequence, the program suited to his needs requires activities, materials and procedures that cannot all be carried on in an ordinary classroom. They can best be conducted in shops, laboratories, auditorium, gymnasium and on athletic fields and playgrounds. It is possible to provide these in 8 grade elementary schools but experience has shown that one of two things is likely to happen; either the program is inadequate to meet the needs of the young adolescent or the cost of providing these services for all elementary schools is excessive, or both. Experience seems to demonstrate, therefore, that it is both educationally and economically desirable to include the 7th and 8th grades as part of the secondary school.

The fact that all the seventh and eighth grade pupils in New London, with the exception of those at Harbor School, are segregated from those of the lower grades would seem to indicate that New London is already moving consciously into an organization in which these grades are no longer actually a part of the elementary school. In this procedure New London

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 into an organization in which these grades are no
 longer actually a part of the elementary school. In this procedure, New London

is following the trend which is generally recognized as sound throughout the United States.

Because secondary education in New London will be dealt with in a separate report by a separate committee, this committee, is defining the elementary school as the kindergarten through grade six and confining its consideration to problems within that area, leaving the organization problems beyond that point to the report on secondary education.

The present organization of the eight schools of the system presents a pattern of great variety. It is composed of schools with the following organizations: one, K-3; one, K-5; three, K-6; one K-8; one, 6; one, 7-8. And in some cases as for example the Waller School, its territory overlaps that of surrounding districts. This variety would seem to indicate that New London's development, like that of most American school systems, has been largely opportunistic, meeting each situation as it occurred with little long range over-all planning. At the present time the local system is faced with a considerable increase in enrollments which will require the expansion of some of the present buildings and the probable erection of some new buildings. Many of the present buildings designed to meet the needs of education nearly a half a century ago are becoming obsolete both educationally and physically. Such a time would seem to be opportune for laying out a pattern of organization which will meet the foreseeable needs of the elementary schools and which will be fairly stable in its outlines.

Proposed Pupil Organization

Important in laying out any plan of pupil organization is a determination of the number of pupils to be served. The probable future population of New London's schools depends on several factors. a) New families, b) New births, c) Pupils attending other than public schools, d) Population growth. The population of New London has been increasing since the turn of the century

Following the trend which is generally recognized as sound throughout the United States.

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The present organization of the eight schools of the system presents a pattern of great variety. It is composed of schools with the following organization: one, K-8; one, K-8; one, K-8; one, K-8; one, K-8; one, K-8; one, K-8; one, K-8. And in some cases as for example the Walter School, its territory overlaps that of surrounding districts. This variety would seem to indicate that New London's development, like that of most American school systems, has been largely haphazard, meeting each situation as it occurred with little long range planning. At the present time the local system is faced with a considerable increase in enrollments which will require the expansion of some of the present buildings and the probable erection of some new buildings. The present buildings designed to meet the needs of education nearly half a century ago are becoming obsolete both educationally and physically. A time would seem to be opportune for laying out a pattern of organization which will meet the foreseeable needs of the elementary schools and which will fairly stand in its outlines.

Needed Pupil Organization

Important in laying out any plan of pupil organization is a determination of the number of pupils to be served. The probable future population of New London's schools depends on several factors. a) New families, b) New births, c) Pupils attending other than public schools, d) Population growth. The population of New London has been increasing since the turn of the century.

but the rate of increase declined sharply during the decade 1930-1940. The census figures are as follows:

| <u>Census</u> | <u>Population</u> | <u>Increase</u> | <u>Rate</u> |
|---------------|-------------------|-----------------|-------------|
| 1900 | 17,548 | | |
| 1910 | 19,659 | 2,111 | 12% |
| 1920 | 25,688 | 6,029 | 30% |
| 1930 | 29,640 | 3,952 | 15% |
| 1940 | 30,456 | 816 | 3% |

New Families

New London has no opportunity for territorial growth since it is completely surrounded on the south by Long Island Sound, on the east by the Thames River and on the north and west by the town of Waterford. The trend toward decentralization which in most cities of the United States has had the effect of producing rapid growth in suburban communities at the expense of growth in the city is evident in New London. A comparison with the Waterford census makes this apparent.

Growth of Waterford

| <u>Census</u> | <u>Population</u> | <u>Increase</u> | <u>Rate</u> |
|---------------|-------------------|-----------------|-------------|
| 1900 | 2,904 | | |
| 1910 | 3,097 | 193 | 7% |
| 1920 | 3,935 | 838 | 27% |
| 1930 | 4,742 | 807 | 21% |
| 1940 | 6,594 | 1,852 | 39% |

The comparison shows that since 1920 Waterford has been growing at a more rapid rate than New London. In fact, from 1930 to 1940 the rate of growth of Waterford was 13 times as great.

Any considerable increase in population through the influx of new families is dependent largely on the introduction of new industry within the general area. With the exception of Bates Wood and area to the south, there is little space available in New London for the location of the type of industry which would employ any significant number of workers - and this territory is quite rough in terrain. On the other hand, Waterford has plenty of relatively

the rate of increase declined sharply during the decade 1930-1940. The
 and figures are as follows:

| Rate | Increase | Population |
|------|----------|------------|
| 12% | 8,111 | 17,848 |
| 30% | 8,028 | 19,877 |
| 15% | 3,938 | 22,815 |
| 3% | 818 | 30,458 |

Families

New London has no opportunity for territorial growth since it is com-
 pletely surrounded on the south by Long Island Sound, on the east by the
 Thames River and on the north and west by the town of Waterford. The trend
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Growth of Waterford

| Rate | Increase | Population |
|------|----------|------------|
| 7% | 193 | 2,904 |
| 8% | 838 | 3,097 |
| 21% | 807 | 3,938 |
| 33% | 1,838 | 4,745 |
| | | 6,584 |

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inexpensive sites available and is therefore much more likely to attract new industry. The multi-million dollar development of the Connecticut Light and Power is a case in point, though this will add more largely to the grand list than to the population, development of industry in Waterford might increase New London population somewhat. The future growth in population in New London through the influx of new families, however, is not likely to be great so far as can be foreseen in the near future. There might even be loss by families moving to the suburbs. Barring unforeseen developments it appears that future growth will be slow and probably nearly stabilize around 35,000. It will not greatly affect the school population.

Birth rates

The birth rate in New London presents quite a different picture. In common with the rest of the United States, New London's birth rate has risen tremendously. The report of the State Health Department for births to residents of New London is as follows:

| | | | |
|------------|------------|------------|------------|
| 1928 - 578 | 1933 - 509 | 1938 - 466 | 1943 - 681 |
| 1929 - 541 | 1934 - 445 | 1939 - 436 | 1944 - 660 |
| 1930 - 584 | 1935 - 484 | 1940 - 445 | 1945 - 555 |
| 1931 - 517 | 1936 - 443 | 1941 - 505 | 1946 - 663 |
| 1932 - 486 | 1937 - 441 | 1942 - 603 | 1947 - 647 |
| Total 2706 | 2322 | 2455 | 3206 |

Estimate for next five years would be 2,886

In conformity to the State Health Department discussion of probable future births it is estimated that the number of births will drop about 10 per year for the next five years.

Normally children born in a given year enter kindergarten five years later. Taking the relation between births and school enrollments five years later over the past five years as typical, the school expectancy grade by grade in terms of average daily membership will be as follows:

expensive sites available and is therefore much more likely to attract new industry. The multi-million dollar development of the Connecticut Light and Power is a case in point, though this will add more largely to the grand list than to the population. Development of industry in Watertown might increase London population somewhat. The future growth in population in New London through the influx of new families, however, is not likely to be great, far as can be foreseen in the near future. There might even be loss by families moving to the suburbs. Barring unforeseen developments it appears that future growth will be slow and probably nearly stabilise around 35,000. This will not greatly affect the school population.

Birth rates

The birth rate in New London presents quite a different picture. In comparison with the rest of the United States, New London's birth rate has risen markedly. The report of the State Health Department for births to residents of New London is as follows:

| | | | |
|------------|------------|------------|------------|
| 1938 - 578 | 1938 - 309 | 1938 - 456 | 1945 - 681 |
| 1939 - 541 | 1939 - 445 | 1939 - 436 | 1944 - 660 |
| 1940 - 584 | 1940 - 494 | 1940 - 445 | 1943 - 655 |
| 1941 - 517 | 1941 - 473 | 1941 - 505 | 1942 - 683 |
| 1942 - 486 | 1942 - 441 | 1942 - 603 | 1947 - 647 |
| Total 2708 | Total 2332 | Total 2456 | Total 3208 |

Estimate for next five years would be 2,886

In conformity to the State Health Department discussion of probable future births it is estimated that the number of births will drop about one per year for the next five years. Normally children born in a given year enter kindergarten five years later. Taking the relation between births and school enrollment five years later over the past five years as typical, the school expectancy grade by grade in terms of average daily membership will be as follows:

TABLE
New London Predicted School Enrollment 1948 -58
Elementary Grades

| Births | 1942 | 1943 | 1944 | 1945 | 1946 | 1947 | 1948 | 1949 | 1950 | 1951 |
|---------|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 603 | 681 | 660 | 555 | 664 | 647 | 637* | 627* | 617* | 607* |
| | 1948-9 | 1949-50 | 1950-1 | 1951-2 | 1952-3 | 1953-4 | 1954-5 | 1955-6 | 1956-7 | 1957-8 |
| Enroll. | | | | | | | | | | |
| Kdg. | 306 | 297 | 250 | 299 | 291 | 287 | 282 | 278 | 273 | 269 |
| 1 | 470 | 531 | 514 | 432 | 517 | 504 | 496 | 489 | 481 | 473 |
| 2 | 360 | 458 | 517 | 501 | 421 | 504 | 491 | 484 | 476 | 468 |
| 3 | 287 | 339 | 404 | 456 | 442 | 372 | 445 | 433 | 427 | 420 |
| 4 | 292 | 284 | 335 | 400 | 451 | 438 | 368 | 440 | 429 | 422 |
| 5 | 264 | 275 | 268 | 315 | 377 | 425 | 412 | 347 | 415 | 404 |
| 6 | 291 | 259 | 269 | 262 | 309 | 368 | 416 | 403 | 339 | 406 |
| Spec. | 68 | 72 | 74 | 76 | 80 | 83 | 86 | 87 | 87 | 86 |
| Total | 2,338 | 2,515 | 2,631 | 2,741 | 2,888 | 2,981 | 2,996 | 2,961 | 2,927 | 2,948 |

1st grade - 77.92% of births 6 years earlier.
 2nd grade 97.42% of enrollment when class was a 1st grade.
 3rd grade 85.95% " " " " " "
 4th grade 85.03% " " " " " "
 5th grade 80.15% " " " " " "
 6th grade 78.40% " " " " " "

Figures through 1953-4 based on actual births to date. It is assumed that the number of births will drop off at the rate of 10 per year.
 Kindergarten estimated as 45% of those born 5 years earlier
 Special estimated as .024 of ADM without Specials

* Estimate of number of births 6 years earlier

7

34

10

1

New London Free Public School Enrollment 1900-08

Attendance at non-public schools

Attendance figures from St. Joseph's and St. Mary's school would lead to the conclusion that non-public school enrollment may be expected to continued about as at present. (see table)

Enrollment in St. Joseph's and St. Mary's School Grades K - 8

| | |
|------|-----|
| 1941 | 697 |
| 1942 | 677 |
| 1943 | 678 |
| 1944 | 723 |
| 1945 | 688 |
| 1946 | 697 |
| 1947 | 726 |
| 1948 | 727 |

changes at non-public schools

Attendance figures from St. Joseph's and St. Mary's school would lead

the conclusion that non-public school enrollment may be expected to

remain about as at present. (see table)

Enrollment in St. Joseph's and St. Mary's School
Grades K - 8

| | |
|------|-----|
| 1941 | 687 |
| 1942 | 677 |
| 1943 | 676 |
| 1944 | 723 |
| 1945 | 686 |
| 1946 | 697 |
| 1947 | 728 |
| 1948 | 737 |

ELEMENTARY SCHOOL BUILDINGS

Judging the adequacy of school buildings means more than seeing how old they are or finding out if they contain enough space to seat a given number of pupils. To be adequate, school buildings should provide facilities so that the school staff and pupils can carry on a good school program effectively and economically. To form a judgment of the adequacy of the buildings in a city school system requires the consideration of many elements besides the space provided.

The major part of the day of school-age children is spent in school buildings. Their health in regard to posture, eyesight, hearing, nervous reactions, toilet habits, their attitudes toward cleanliness, beauty of environment, care of public property, are influenced by the provisions and conditions of the building and equipment. The protection of their health as well as their physical safety in the school is related to the ventilation, heating, and cleaning of the buildings, the provisions for care of wraps, for personal cleanliness, for sanitation, for the securing and eating of a proper noon lunch, and for the prevention of fire. The location of schools furthermore influences the health and safety of pupils in the distance they must travel, and hence whether they shall walk or ride, the routes they shall travel and the hazards related thereto.

School buildings and equipment, therefore, need to be considered more than just as places where teachers meet pupils and lessons are recited. Besides being workshops which may be so built and equipped as to facilitate or handicap the varied learning activities of pupils, they need to be considered as agencies influencing the growth, health, and behavior of children. Their location needs to be decided by more than just where land is available. The schools need to be located in reference to the health, physical and moral safety, and convenience of those who attend. Furthermore, since a school building once built is

ELEMENTARY SCHOOL BUILDINGS

Judging the adequacy of school buildings means more than seeing how old they are or finding out if they contain enough space to seat a given number of pupils. To be adequate, school buildings should provide facilities so that school staff and pupils can carry on a good school program effectively and economically. To form a judgment of the adequacy of the buildings in a city school system requires the consideration of many elements besides the space provided.

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likely to be used for fifty or more years, and its location influences the location or effectiveness of use of the other school buildings in a school system, each decision concerning a single building needs to be considered in terms of the long-range school needs and of the needs of the school district as a whole.

The following factors, therefore, must be taken into consideration when judging the adequacy of the school buildings in a community:

A. Walking-Distance for Pupils

A well-planned system of elementary schools will provide schools within walking distance of pupils' homes, if there are enough children within walking-distance to provide a good school program economically.

In planning the location of schools for a city it is therefore desirable to lay out the entire area into walking-distance units. When a school is built it should be located as nearly as possible in the center of one of these areas. As many schools would be provided in the city as there were walking-distance units containing enough children to justify a school. In any unit not having enough pupils to warrant a school the children would attend school in the closest unit. If and when the unit contained enough pupils to justify a school it could be built near the center of the unit and be well placed with reference to all other schools. The size of walking-distance areas will depend on the policies adopted regarding the distances that it is reasonable to expect children to walk to school. Under safe conditions, it is common practice to have pupils from kindergarten through grade 6 walk about one-half to three-quarters of a mile to school. This means a total of not more than two to three miles a day for pupils who go home to lunch. In a single stretch a three-quarter mile walk might take approximately fifteen to twenty minutes. Thus an elementary school walking-distance unit will have a radius of approximately one-half to three-quarters of a mile.

The element to safety is an important consideration in determining the

to be used for fifty or more years, and its location influences the location of other school buildings in a school system, or effectiveness of use of the other school buildings in a school system, location concerning a single building needs to be considered in terms of the needs of the school district as a whole. The following factors, therefore, must be taken into consideration when the adequacy of the school buildings in a community:

Walking-Distance for Pupils

well-planned system of elementary schools will provide schools within a distance of pupils' homes, if there are enough children within walking-distance to provide a good school program economically. In planning the location of schools for a city it is desirable to divide the entire area into walking-distance units. When a school is built it should be located as nearly as possible in the center of one of these areas, so that the walking-distance for pupils would be provided in the city as far as possible. Containing enough children to justify a school, in any unit not having pupils to warrant a school the children would attend school in the closest unit. If the unit contained enough pupils to justify a school it could be near the center of the unit and be well planned with reference to all factors. The size of walking-distance areas will depend on the facilities regarding the distance that it is reasonable to expect children to walk. Under such conditions, as is common practice to have pupils from grades through grade 6 walk about one-half to three-quarters of a mile to school means a total of not more than ten to thirty miles a day for pupils to be walked. In a single school a three-quarter mile walk might mean fifteen to twenty minutes. When an elementary school is built it should have a radius of approximately one-half to three-quarters of a mile to maintain an important consideration in determining the

location of schools. Whenever possible, it is desirable to place schools so that children will not have to cross streets with a heavy flow of traffic. When it is impossible to avoid crossing main thoroughfares traffic control by police and safety patrols should be provided. Express highways, such as the one leading to the bridge approach in New London, are almost insuperable barriers, and the children should not be allowed to cross them. Experience in other cities has proved that neither underpasses nor overpasses provide a solution to the problem. Underpasses are undesirable because of the cost of constructing and maintaining them, and because of the opportunity they afford for the activities of thieves and perverts and the committing of nuisances. In addition, unless there is constant and careful police supervision both underpasses and overpasses fail to accomplish their purpose because children do not use them.

B. Age of Buildings.

The mere fact that a building is old does not indicate in itself that it is not an efficient school building. However, when buildings are more than twenty-five years old they are often found to contain conditions which make them educationally and/or economically inefficient, such as fire hazards, heating and ventilating systems which are inefficient and expensive to replace, repair, and maintain, and lack of many of the facilities that are considered necessary today in order to carry on a good elementary school program.

C: Safety of Building.

An elementary school that is more than a one story school building should be of fire-resistive construction, and not over two stories in height. Water mains with proper hoses, chemical fire extinguishers, and devices for turning in alarms should be located on each floor. Stairwells should be enclosed and should lead directly to the outside of the building. Schools which are not constructed of fire resistive material should be equipped with every possible fire stopping

tion of schools. Whenever possible, it is desirable to place schools so children will not have to cross streets with a heavy flow of traffic. It is impossible to avoid crossing main thoroughfares traffic control by and safety patrols should be provided. Express highways, such as the leading to the bridge approach in New London, are almost impassable for cars, and the children should not be allowed to cross them. Experience has proved that neither underpasses nor overpasses provide a solution to the problem. Underpasses are undesirable because of the cost of erecting and maintaining them, and because of the opportunity they afford the activities of thieves and perverts and the committing of nuisances. In addition, unless there is constant and careful police supervision both underpasses and overpasses fail to accomplish their purpose because children do not use them.

Age of Buildings.

The mere fact that a building is old does not indicate in itself that it is an efficient school building. However, when buildings are more than twenty-five years old they are often found to contain conditions which make them economically and/or economically inefficient, such as fire hazards, heating and lighting systems which are inefficient and expensive to replace, repair, and maintain, and lack of many of the facilities that are considered necessary today for to carry on a good elementary school program.

Safety of Buildings.

An elementary school that is more than a one story school building should be fire-resistant construction, and not over two stories in height. Water with proper hoses, electrical fire extinguishers, and devices for turning in should be located on each floor. Stairways should be enclosed and should be directly to the outside of the building. Schools which are not constructed fire-resistant material should be equipped with every possible fire stopping

device, but it should be recognized that the fire hazard cannot be completely eliminated in such buildings.

D. Size of School Building Units.

Small school buildings are expensive and also educationally inefficient. They are more expensive to build, to operate, and to maintain than large buildings. Larger schools can be provided with auditorium, gymnasium, shop, science, art, homemaking and other facilities that it would be financially impractical to duplicate in a number of small schools. This makes it possible for the larger school to offer a richer educational program for boys and girls. The optimum size of an elementary school building remains to be determined, but the definite tendency is toward minimum enrollments of more than 300 pupils.¹ Studies have shown that, in communities whose educational offerings are generally accepted as being of a superior type, the efficiency of instruction has increased and the per pupil cost of education decreased as the size of the building increases. Some of the most effective personalized elementary education in public schools known to the members of the Survey Committee today is in schools with six hundred or more pupils.

E. The School Site.

The school sites should be accessible, yet far enough from streets so that traffic noise is avoided. The environment should be pleasant and quiet; commercial and factory areas should be avoided. Enough land is needed to allow space for landscaping, parking area, and for separate play courts and play fields for the different age groups. "It is unwise to plan an elementary school building on less than five acres of land ... If the site is combined with a community park it should be of twenty acres or more, otherwise it should be of

¹ Your School District, Report of the National Commission on School District Reorganization, 1948, p. 81

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School Site

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five acres or more depending on the number of grades in the school."¹

F. Play Areas and Facilities.

In laying out play areas and facilities the needs of differing age levels should be recognized and provided for. Kindergarten children should have access to an area with space for sandboxes, and playhouses. Part of the space should be surfaced for the use of children's toys and vehicles. The primary grades need similar space, equipped with apparatus suitable for their age. Play areas should be planned so that the different age groups can play without interfering with the games or activities of other groups. Each area needs to be protected by a fence from street hazards and from intrusion, and should be provided with outdoor drinking fountain, and have direct access to toilet facilities.

Older children need a wider range of play facilities. Appropriately surfaced, fenced, and equipped baseball, basketball, handball, volley ball, soccer, and track space is needed. Provision can be made for flooding part of the area for ice skating. Many cities supplement these school facilities by creating public parks and recreation fields contiguous to the schools.

G. Building Facilities.

A good elementary school program involves much more than mere "recitation" by the pupils of "assignments" made by the teacher and "learned" out of books. Elementary education aims to help children grow in many ways, intellectually, physically, morally, esthetically, spiritually, through their participation in many kinds of activities and their working in many different groups. In order successfully to carry on this type of school program a good elementary school building with various types of equipment is necessary. A school building which is merely a collection of rooms with blackboards and desks is not an adequate school plant. In order to carry on a good educational program an

¹ Strayer, George D., and Engelhardt, N.L., Standards for Elementary School Buildings, N.Y. Teachers College, Columbia University, 1933, p. 16

exists or more depending on the number of grades in the school.

Play Areas and Facilities

In laying out play areas and facilities, the needs of different age levels should be recognized and provided for. Kindergarten children should have access to areas with space for sandboxes, and playhouses. Part of the space should be reserved for the use of children's toys and vehicles. The primary grades need play areas, equipped with apparatus suitable for their age. Play areas should be planned so that the different age groups can play without interfering with the various activities of other groups. Each area needs to be protected from street hazards and from intrusion, and should be provided with non-drinking fountain, and have direct access to toilet facilities. Older children need a wider range of play facilities. Appropriately equipped, fenced, and equipped sandboxes, basketball, handball, volleyball, soccer, track space is needed. Provision can be made for flooding part of the area for skating. Many cities supplement their school facilities by creating parks and recreation fields contiguous to the schools.

Building Facilities

A good elementary school program involves much more than mere "recreation" for pupils of "recreants" made by the teacher and "learned" out of books. Elementary education aims to help children grow in many ways, intellectually, morally, aesthetically, spiritually, through their participation in many kinds of activities and their working in many different groups. In successfully to carry on this type of school program a good elementary building with various types of equipment is necessary. A school building which is merely a collection of rooms with blackboards and desks is not an adequate school plant. In order to carry on a good educational program an

elementary school should contain facilities such as the following:

1. Classrooms: with good natural and artificial lighting, well heated and ventilated, sanitary and with good acoustics, large enough for pupils' desks, for storage cabinets, for some pupil activities, for the teacher's desk, and for small group conferences.
2. Kindergarten: with ample floor area, window space, storage room, adjoining toilet facilities, wrap storage, and independent play area.
3. Library: containing adequate reference and general reading matter, magazines, an adjoining librarian's workroom, and an adjoining conference and study room.
4. Health: with space for physical examinations, cot facilities for children who are ill, and work of nurse.
5. Office: with waiting room, work and filing space, and principal's office.
6. Toilet facilities: Sanitary toilet and wash rooms, equipped with soap, towels, hot water and mirrors.
7. Custodial space: with ample storage space for school supplies, cleaning materials, and outdoor athletic equipment.
8. Indoor play space: with shower and locker equipment for boys and girls.
9. Lunch room: with facilities for securing and eating hot lunches.
10. Auditorium: with stage equipment, dressing space, and storage space for sets, etc.
11. Shop: equipped for various types of arts and crafts.
12. Play courts and fields: graded for different age groups, with appropriate equipment and surfacing.
13. Teachers and supervisors room: with facilities for committee meetings, curriculum work, conferences with parents, rest, and lavatory provision

This does not mean that the facilities necessarily all require separate rooms

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 3. Library: containing adequate reference and general reading matter, magazines, an adjoining librarian's workroom, and an adjoining conference and study room.
 4. Health: with space for physical examinations, for facilities for children who are ill, and work of nurse.
 5. Office: with writing room, work and filing space, and principal's office.
 6. Toilet facilities: Sanitary toilet and wash rooms, equipped with soap, towels, hot water and mirrors.
 7. Quarantine space: with ample storage space for school supplies, cleaning materials, and outdoor athletic equipment.
 8. Indoor play space: with shower and locker equipment for boys and girls.
 9. Lunch room: with facilities for securing and eating hot lunches.
 10. Auditorium: with stage equipment, dressing space, and storage space for sets, etc.
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- This does not mean that the facilities necessarily all require separate rooms.

Careful planning and programing of activities will frequently allow one properly equipped room to serve several functions during the course of a day or week.

H. Provisions for Community and Neighborhood Use.

The school as a center of community activities has persisted through the development of America. As community life has changed, and as cities have grown, the total community can no longer be served by one school. More than one meeting house, one library, and one school is required. Transportation and communication facilities have expanded neighborhood limits so that today it is easier for persons miles from each other to see each other, to visit, to participate together in social activities than was true a generation ago of neighbors only a few blocks apart from each other. Never-the-less, there are values in preserving neighborhood interests in large communities and the schools, particularly the walking distance elementary schools can and do serve as common neighborhood centers for many activities. Schools with the proper facilities and management can thus offer to communities far more than a service to young children of the neighborhood. They can serve as a means of developing and invigorating the neighborhood solidarity that comes from personal, face-to-face relationships through participation of adults and family groups in common activities.

The auditorium, gymnasium, lunchroom, library, and conference room are the school facilities most often used for community functions and meetings. In planning a school building it is wise to arrange these units so that they are easily accessible from the street, and so that they can be shut off from the rest of the building and used without necessitating the opening of the entire plant.

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Building Evaluation

One way to indicate the degree of adequacy of existing school buildings is to list any and all ways in which they are inadequate, and then to decide whether or not these inadequacies are best remedied by changes in the buildings or by new buildings. Such a procedure assumes a knowledge of what are the needed facilities and then a systematic checking of the building against this knowledge.

Score cards, each listing more than one hundred and fifty items, have been made for use in the systematic appraisal of the adequacy of school buildings. These lists include approximately 150 items on such matters as the school building site and its use; the plan and construction features of the building, provision for heating, ventilation, protection from fire, cleaning, water supply, toilets, natural and artificial light, wrap and supply storage, arrangement of rooms in reference to their use, equipment for school work, provisions for physical education, auditorium group activities, serving and eating lunches, administrative offices, and other items. The check lists have been developed over a period of years by persons who have combined the results of research studies in the field of school buildings with the consensus of judgment of experienced school teachers and administrators. Numerical scores are assigned

scores below 500 it is usually unwise to spend more money on it. If a building scores below 500 the wisest action - educationally and financially - is to abandon it as soon as possible.

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Building Evaluation

one way to indicate the degree of adequacy of existing school buildings is to list all ways in which they are inadequate, and then to decide whether or not these inadequacies are best remedied by changes in the buildings or by new buildings. Such a procedure assumes a knowledge of what are the facilities and then a systematic checking of the building against this list. The list includes approximately 130 items on such matters as the school site and its use; the plan and construction features of the building; protection from fire, flooding, ventilation, heating, water supply, natural and artificial light, wind and supply storage, arrangement of rooms in reference to their use, equipment for school work, provisions for education, auditorium, group activities, serving and eating lunches, administrative offices, and other items. The check lists have been developed over a period of years by persons who have combined the results of research in the field of school buildings with the consensus of judgment of experienced school teachers and administrators. Numerical scores are assigned

to each item so that one may arrive at a total score for a building.¹

Each of the building units of the New London schools was checked on this score card by a member of the survey committee who inspected all the rooms, store rooms, attic spaces and basements of each building. Other members of the committee supplemented these observations by their own inspections. Results were then considered in relation to the projected school enrollment, and to the proposed organization plan for the school system.

Scores of New London Elementary Schools
on Strayer-Englehardt Score Card

| | |
|-------------|-----|
| Bartlett | 370 |
| Nathan Hale | 460 |
| Harbor | 460 |
| Jennings | 575 |
| Nameaug | 410 |
| Saltonstall | 450 |
| Waller | 510 |
| Winthrop | 445 |

The real significance of these scores is seen if one examines the items on the list together with the detailed scoring, but a few generalizations may be noted. While a building theoretically might score 1000 points, in practice very few buildings score above 900 points. A building scoring 750 points or more is very satisfactory, depending on the items which bring down the score. A building scoring of 500 to 750 points is usually structurally good enough to warrant further financial investment to improve its efficiency. If a building scores below 500 it is usually unwise to spend more money on it. If a building scores below 350 the wisest action - educationally and financially - is to abandon it as soon as possible.

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¹ Strayer and Englehardt, Score Card for Elementary School Buildings and Score Cards for High School Buildings. Bureau of Publications, Teachers College Columbia University.

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| | |
|-----|-------------|
| 570 | Bartlett |
| 480 | Nathan Hale |
| 460 | Harbor |
| 375 | Jennings |
| 410 | Kennedy |
| 480 | Seltonstall |
| 510 | Waller |
| 445 | Winthrop |

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Some of the reasons why New London elementary schools score so low are as follows:

Strayer and Engelhardt, Score Card for Elementary School Buildings and Score Card for High School Buildings. Bureau of Publications, Teachers College, Columbia University.

Location. Most of New London's schools are poorly located in relation to the total area to be served. Several schools are grouped within a few blocks of each other in the center of the city, while in large areas in the northern, northwestern, and southern end of the city there are no schools within reasonable walking distance from pupils' homes. In laying out a long-range program for the educational facilities of the city, this factor will be taken into consideration.

Size of Sites. With the possible exception of Nathan Hale, the sites of New London's schools are too small to afford the space necessary for adequate landscaping, playfields, and parking facilities. The size of the sites are listed below:

| <u>School</u> | <u>Acres</u> |
|---------------|----------------------|
| Bartlett | 3.06 |
| Nathan Hale | 4.17 |
| Harbor | 2.94 |
| Jennings | 3.02 |
| Nameaug | 1.79 |
| Saltonstall | 1.31 |
| Waller | .52 |
| Winthrop | 4.00 (approximately) |

Even at the schools where small playgrounds are available next to the buildings, these yards are almost completely undeveloped. Surfacing is poor, equipment is meagre, and in some cases even the fencing necessary for safety is lacking.

Size of Buildings. The number of classrooms in each building are as follows:

| | |
|-------------|-----|
| Bartlett | 15 |
| Nathan Hale | 3* |
| Harbor | 19 |
| Jennings | 13 |
| Nameaug | 16 |
| Saltonstall | 15 |
| Waller | 7** |
| Winthrop | 17 |

Both Waller and Nathan Hale are too small to enable the city to provide all the facilities needed in a good school building at a reasonable per-pupil cost.

* plus two rooms now used as office

** two of these rooms are undersized

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| School | Address |
|-------------|----------------------|
| Warwick | 4.00 (approximately) |
| Waller | 1.31 |
| Salisbury | 1.75 |
| Manassas | 2.04 |
| Leominster | 2.17 |
| Harbor | 3.08 |
| Nathan Hale | 3.08 |
| Portsmouth | 3.08 |

on at the schools where small playgrounds are available next to the building. These yards are almost completely undeveloped. Landscaping is poor, equipment is lacking, and in some cases even the fencing necessary for safety is lacking. The number of classrooms in each building are as follows:

| | |
|-------------|----|
| Warwick | 17 |
| Waller | 17 |
| Salisbury | 17 |
| Manassas | 17 |
| Leominster | 17 |
| Harbor | 17 |
| Nathan Hale | 17 |
| Portsmouth | 17 |

In Waller and Nathan Hale are too small to enable the city to provide all the needed in a good school building at a reasonable per-pupil cost.

Two rooms are used as offices of these rooms are unoccupied.

The size of the other schools is not unreasonably small. However, in the development of the long-range plan for New London's elementary schools, it will be economical, wherever possible, to operate one large building in each walking-distance unit rather than several schools in the same neighborhood.

Safety. Six of New London's elementary schools cannot be considered fire resistant, nor can they be made fire resistant. In addition five of them are three stories in height. Although much work has been done to make the buildings as safe as possible by means of installing screened stairwells and metal covered doors, fire hazard is still present.

Heating and Ventilation. As was pointed out in the section on building maintenance, the heating equipment of all schools is given an adverse report because of the lack of any method of controlling classroom temperature. Also, although at one time the New London elementary schools had mechanical ventilating systems, many of these have been removed, and others are no longer used. As a result, classroom ventilation is not good.

Health Education. In none of the elementary schools is there a suitable gymnasium or other indoor play space provided, nor is there room for athletic equipment. Although the Waller and Jennings schools have gymnasium space, it is poorly located next to classrooms. Since games and athletic programs cannot be carried on without disturbing classes, the use of the space for gymnasium purposes is seriously curtailed. None of the schools have shower or dressing room facilities.

In some of the schools there is no suitable unit for health inspection or examination, for the school nurse, for first aid, or for the ill or indisposed to rest.

Although most of the school toilets have been relocated on each floor, several schools still have toilets only in the basements. In some cases hot water is not supplied in the wash basins. It is extremely difficult to inculcate good health habits under these conditions.

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 in the wash basins. It is extremely difficult to maintain good health
 under these conditions.

Hot Lunch Facilities. With the exception of Jennings school, no lunchroom facilities are provided. In this school the lunchroom is located in the basement and both space and equipment are inadequate.

Educational Facilities. One of the chief reasons for the adverse scores received by New London elementary schools is the lack of the facilities needed to carry on a good educational program. None of New London's schools can be considered new and most of them are forty or fifty years old. Dates of construction are as follows:

| | | | |
|-------------|------|-------------|------|
| Bartlett | 1896 | Nameaug | 1891 |
| Nathan Hale | 1891 | Saltonstall | 1903 |
| Harbor | 1909 | Waller | 1923 |
| Jennings | 1925 | Winthrop | 1893 |

New London's elementary schools were built in the days when the educational program was meagre, and the time of the children was spent primarily in sitting listening to the teacher, reading from textbooks, and reciting lessons. As a result, the schools are collections of classrooms. The facilities that are needed for the operation of a good modern elementary school curriculum, such as libraries, and rooms especially equipped for art, music, shopwork, science, and household arts, are missing. Almost all the schools lack an auditorium. Where auditorium facilities have been improvised, they are inadequate. The auditorium at Jennings, like the gym, is so located that it is all but impossible to use it while classes are in progress. At Harbor two large rooms have been converted into a small auditorium, unfortunately on the third floor, where only a small number of students can be assembled at one time. Stage facilities are nonexistent.

Although some schools have set aside a classroom for a "library", these rooms are primarily book-storage rooms having old textbooks, and should ^{not} be considered libraries in any functional sense.

Lack of facilities other than classrooms is one of the serious problems facing the New London school system. Even though, temporarily, New London has sufficient

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| | | | |
|------|---------|------|---------|
| 1896 | Walling | 1891 | Walling |
| 1891 | Walling | 1893 | Walling |
| 1909 | Walling | 1923 | Walling |
| 1925 | Walling | 1928 | Walling |

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classroom space so that every pupil can be provided a place to sit in school, the facilities are inadequate for the conduct of what could be considered a good elementary school program.

Several conclusions have been reached so far:

1. New London's elementary schools are old, poorly located in respect to the area to be served, and uneconomically small. With the exception of Jennings and Harbor, none of the present elementary school buildings should be included in the long-range plan.
2. New London's elementary schools are simply collections of classrooms, and the other facilities needed for a good educational program are lacking.
3. New London faces a large increase in pupil population. Within five years there will be as many pupils in the first six grades as there are now in all eight grades.
4. New London could build new schools to absorb the increase in enrollment, and build additions to the old schools so as to include in each one the facilities needed for a good program - health rooms, gyms, libraries, etc.

This does not seem a feasible solution because:

1. The cost of duplicating these facilities in each elementary school would be prohibitive.
2. All of the sites are small even for the present buildings. There is little or no room for expansion, with the possible exception of Winthrop School. This school is poorly located for the long-range development of New London Schools.
3. Some of the buildings should not be included in the long-term program for if large amounts were spent to expand the sites, and modernize the schools, New London would still have buildings expensive to operate and maintain.
4. A number of New London's schools are poorly located to serve the present and future pupil population. Each major expenditure should be a step toward a plan that will meet the long-term needs of the city. This would mean that it would be desirable to invest money on structures located on sites suitable in the long-term plan.

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Projecting the Building Program for the Elementary Schools

Grades 7 and 8 should be considered as part of the secondary schools of New London. This point has been made earlier (p. 19). It will be discussed more at length in the report on secondary education in New London. We shall, therefore, not discuss here whether grades 7 and 8 should be housed separately, with grade 9, or with grades 9 to 12. We would note, however, (1) that none of the present elementary schools are adequately equipped for a good 7 and 8 grade program, and (2) that removal of grades 7 and 8 from the elementary schools would release space in the elementary schools needed to accomodate increasing enrollments there. The remainder of this section, therefore, outlines a long-range program for providing elementary school building facilities for New London.

School Attendance Units

The first step in developing a long-range plan for New London was to lay out the city in elementary school districts whose boundaries will be relatively permanent regardless of future changes in school enrollments. Walking distances, traffic barriers, and possibilities of future development of the town were all considered and balanced.

With these considerations in mind, New London would be best served by six elementary districts somewhat less than a square mile in size as follows:

District I. This includes all the southern tip of New London from the Sound to the northern line of Mitchell Woods extended east to the Sound and west to Waterford line. It contains nearly a square mile. This district possesses some of the best residential property in the city. It is the most rapidly growing section of the city with between thirty and forty new houses either already erected or in process. The new sewer along Alewife Cove will probably accelerate this development. The land, is however, fairly expensive and perhaps as a consequence the growth in housing has not produced a corresponding increase in school population. On October 1st, this district contained about 6% of the city's school children (142 pupils) in

Projecting the Building Program for the Elementary Schools

Grades 7 and 8 should be considered as part of the secondary schools of New York City. This point has been made earlier (p. 12). It will be discussed more at length in the report on secondary education in New York City. We shall, therefore, discuss here whether Grades 7 and 8 should be housed separately, with Grade 9, or Grades 9 to 12. We would note, however, (1) that none of the present elementary schools are adequately equipped for a good 7 and 8 grade program, and (2) that all of Grades 7 and 8 from the elementary schools would release space in the elementary schools needed to accommodate increasing enrollments there. The remainder of the section, therefore, outlines a long-range program for providing elementary building facilities for New York City.

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District I. This includes all the southern tip of New York City from the South to the northern line of Mitchell Road extended east to the Bronx and west to Waterford. It contains nearly a square mile. This district possesses some of the best real property in the city. It is the most rapidly growing section of the city between thirty and forty new houses either already erected or in process. The sewer along Alameda Cove will probably accelerate this development. The district, however, fairly extensive and various as a consequence the growth in housing not produced a corresponding increase in school population. On October 1st, 1930, the district contained about 33 of the city's school children (113 pupils) in

K-6 grade. There is some rumor that garden apartments may develop here, but this type of apartment seldom produces a normal quota of children. The present enrollment of the district does not warrant a new school being built at this time. However, future developments will probably warrant such a building. Now, while land is available, the Board of Education should acquire a site for such a school against the time of later need. Meanwhile the children from this district may well continue to attend the school in District II.

District II is bounded on the south by the north line of Mitchell Woods extended, on the east by the Sound, on the north by a line running through the center of Willetts Street, down the New York, New Haven and Hartford Railroad and thence southeast to the harbor, and on the west by Waterford. Like District I, this district contains very desirable sites for homes. Some building is already going on particularly between Ocean Avenue and the Waterford town line. Building will undoubtedly increase rapidly with coming of the proposed sewer. About 17% of the city's school enrollment (428 K-6 pupils) reside in this district.

By transfer of the 7 and 8 grade pupils the K-6 pupils from both Districts I and II can be housed in the Harbor School for the next year or two. If, because of future growth, the elementary children in these two districts should exceed the capacity of Harbor School, a primary school might well be erected in District I so constructed as to permit future additions if and when the situation demanded it. Harbor School is well located as the site for District II.

District III includes the area between the Sound on the east, Willetts Street on the south, Waterford on the west and on the north a line through the center of Garfield Avenue, Blackhall Street, Blenman Street, Banks Street, and Sparyard Street to Shaw's Avenue. This is a district in which school children abound and it has considerable undeveloped territory in the hilly northwestern section which may develop rapidly if and when the proposed sewer is extended to this section. At the present time 24% of the school population (571 K-6 pupils) reside in this district.

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 of Street, down the New York, New Haven and Hartford Railroad and thence
 to the harbor, and on the west by Waterford. Like District I, this dis-
 trict is very desirable sites for homes. Some building is already going on
 between Ocean Avenue and the Waterford town line. Building will in-
 crease rapidly with coming of the proposed sewer. About 1% of the
 school enrollment (222 K-8 pupils) reside in this district.

Transfer of the 7 and 8 grade pupils the K-8 pupils from both Districts I
 be housed in the Harbor School for the next year or two. If, because of
 the elementary children in these two districts should exceed the
 Harbor School, a primary school might well be erected in District I so
 as to permit future additions if and when the situation demanded it.

is well located as the site for District II.
 District III includes the area between the Sound on the east, Willets Street
 on the west and on the north a line through the center of
 Avenue, Macdonald Street, Glenn Street, Banks Street, and Spaulding Street
 Avenue. This is a district in which school children abound and it has
 an undeveloped territory in the hilly northern section which may
 justify it and when the proposed sewer is extended to this section. At the
 a 2% of the school population (271 K-8 pupils) reside in this district.

It has the largest school population of any district in the city. At the peak it is estimated that the district will have about 760 K-6 pupils, the remainder probably going to St. Joseph's and St. Marys. Nameaug School is well located as a site for this district.

District IV includes territory within the following boundaries: starting at Shaw's Cove, northwest along Sparyard Street, Blenman Street to Connecticut Avenue, then north along Connecticut Avenue and Fitch Avenue to U.S. Route 1, southeast along U.S. Route 1 and its approaches to Huntington Street to Richards Street, Main Street, Crystal Street, Winthrop Street, Harrison Street and Tenth Street to the harbor. This district contains the heart of the business section. It is fully developed and contains about 23% of the public school enrollment (498 K-6 pupils). This school will probably grow to a peak of about 650 pupils. Any future growth as a result of apartment house development is likely to be fully offset by business encroachment. The best site available in this district would seem to be the Jennings School.

District V is bounded on the west by Waterford, on the north by U.S. Route 1, on the east by Fitch and Connecticut Avenues, and on the south by Garfield Avenue extended to the city line. This district is second in the number of new houses recently erected and has considerable opportunity for future growth. At present it contains about 15% of the school enrollment (354 K-6 pupils) and judging by the preschool census will receive about the same percentage of the anticipated increase, or a peak of approximately 400 pupils. There is no school in this district at the present time and it is suggested that a site in the vicinity of Morgan Park be secured for a new building.

District VI is bounded on the west and north by Waterford, on the east by the Thames River and on the south by U.S. Route 1 and its approaches to Huntington, Richards, Main, Crystal, Winthrop, Harrison and Tenth Streets to the harbor. This is a large sprawling district, cut off from the rest of the city, except below the

largest school population of any district in the city. At the peak it
and that the district will have about 750 K-6 pupils, the remainder
going to St. Joseph's and St. Mary's. Harrison School is well located as a
in this district.

District IV includes territory within the following boundaries: starting at
the northwest corner of Broadway Street, Elmhurst Street to Connecticut Avenue,
along Connecticut Avenue and Fifth Avenue to U.S. Route 1, southeast
to its approaches to Huntington Street to Richards Street, Main
Street, Winthrop Street, Harrison Street and Tenth Street to the
district contains the heart of the business section. It is fully
and contains about 225 of the white school enrollment (425 K-6 pupils).
It will probably grow to a peak of about 650 pupils. Any future growth as
apartment house development is likely to be fully offset by business
The best site available in this district would seem to be the

school.
District V is bounded on the west by Waterford, on the north by U.S. Route 1,
by Fifth and Connecticut Avenues, and on the south by Fairfield Avenue
the city line. This district is second in the number of new houses
erected and has considerable opportunity for future growth. At present
about 125 of the school enrollment (225 K-6 pupils) are located by the
houses will receive about the same percentage of the anticipated increase.
There is no school in this district at the
and it is suggested that a site in the vicinity of Norton Park be

a new building.
District VI is bounded on the west and north by Waterford, on the east by the
and on the south by U.S. Route 1 and its approaches to Huntington,
in Central, Winthrop, Harrison and Elmhurst Streets to the harbor. This is
this district, and off from the rest of the city, except below the

bridge by U.S. Route 1 which constitutes a practically impassable barrier. Much of the district is owned by Connecticut College for Women and the Coast Guard Academy. There is very little desirable land available for future growth unless Connecticut College for Women should decide to place some of its holdings on the market.

At present the district contains 445 pupils (about 15% of the school enrollment) and is likely to get about the same percentage of the anticipated increase which would give it a peak enrollment of 450-500 pupils. The present Winthrop School is not advantageously located as a site for this district and it is suggested that one be secured, if possible near, but not on Williams Street, near the present playground.

Use of Present Buildings

District I. There is no school building in this district. The children attend Harbor School.

District II. Harbor School lacks many of the facilities that are needed for an adequate elementary school. Other undesirable features are a small and undeveloped site, its height, and the fact that toilets are located in the basement. However, since Harbor School is well located, it is recommended that the New London School Board plan to retain Harbor School as a unit in its long-term plan, and make the additions and alterations that are needed to make it a desirable school plant.

Additional land should be acquired to permit the building of a wing containing a gymnasium-auditorium, a lunchroom and a library. Toilets should be relocated on each floor. The playground space should be expanded and developed.

Removal of 7th and 8th grades will enable Harbor School to serve the K - 6 grade of both districts I and II for some years, and postpone necessity for a new school in District I until such time as home building in that district may cause a sufficient increase in school population.

Waller School should be used as long as needed, then discontinued. It is not possible at this time to predict when would be the time that Waller School might well be discontinued, certainly not in the immediate future. Its size, the size

U.S. Route 1 which constitutes a practically impassable barrier. Much of the land is owned by Connecticut College for Women and the Coast Guard Academy. Very little desirable land available for future growth unless Connecticut Women should decide to place some of its holdings on the market.

present the district contains 445 pupils (about 12% of the school enrollment) is likely to get about the same percentage of the anticipated increase. It gives a peak enrollment of 430-500 pupils. The present building is not advantageously located as a site for this district and it is suggested be secured, if possible near, but not on Williams Street, near the present

Use of Present Building

I. There is no school building in this district. The children attend school. Harbor School lacks many of the facilities that are needed for an elementary school. Other undesirable features are a small and undeveloped playground, and the fact that toilets are located in the basement. However, Harbor School is well located, it is recommended that the New London School to retain Harbor School as a unit in its long-term plan, and make the and alterations that are needed to make it a desirable school plant. Local land should be acquired to permit the building of a wing containing an auditorium, a lunchroom and a library. Toilets should be relocated on the playground space should be expanded and developed.

II. The playground space should be expanded and developed. al of 4th and 6th grades will enable Harbor School to serve the K-6 both districts I and II for some years, and postpone necessity for a new District I until such time as some building in that district may cause an increase in school population. School should be used as long as needed, then discontinued. It is at this time to predict when would be the time that Keller School might be discontinued, certainly not in the immediate future. Its size, the size

of the site, its location in reference to Harbor School, the long-range cost of its operation and maintenance - all indicate that it should not be considered as a part of the eventual or long-term school plant in New London. Decision as to when it should be discontinued should come as a result of study year by year of available facilities, school population and school costs. The primary deciding factor should be that use of the building should be discontinued when either

- a) The children will have better educational facilities at Harbor School, or
- b) The children will have as good facilities at Harbor School and the City will save sufficient money to warrant making the change.

District III. Nameaug School is centrally located in District III. However, the school is old and, like Harbor, lacking in facilities except classrooms. Too, since the pupil population of District III will soon reach 750+ an additional plant will be needed. It will not be economical to attempt to remodel or enlarge Nameaug. It is recommended that several acres of land be acquired on Ocean Avenue to the rear of Nameaug School, and that a new school, designed to accommodate 650 pupils, be erected on this site. During the transition period the present Nameaug building may continue in use. This will help carry District III over the student bulge which will come in 1953-58. As soon as possible, the present school should be razed and its site developed for playgrounds for the new school on Ocean Avenue.

District IV. Four schools are now being operated within the boundaries of District IV. Two are old, one is uneconomically small, none have adequate sites. By confining education to K-6, Jennings will become available for use in these grades. It is recommended that the capacity of Jennings School be enlarged to provide additional classrooms, gymnasium-auditorium, library, and lunchroom needed for a school to accommodate 600 pupils. The site of the Nathan Hale School should be developed to provide playgrounds and playing fields. Nathan Hale can continue in use for central office, shower and locker facilities and special classes.

The Saltonstall School should be closed as soon as possible. If the Saltonstall School were located well, if the site were adequate or could economically be

its location in reference to Harbor School, the long-term cost of its maintenance - all indicate that it should not be considered as a part of or long-term school plant in New London. Decision as to when it should be discontinued should come as a result of study year by year of available school population and school costs. The primary deciding factor should be the building should be discontinued when either children will have better educational facilities at Harbor School, or children will have as good facilities at Harbor School and the City will have sufficient money to warrant making the change.

Harbor School is centrally located in District III. However, the building is inadequate except for classrooms. Too, since the population of District III will soon reach 7504 an additional plant will be needed. It will not be economical to attempt to remodel or enlarge Harbor School. It is suggested that several acres of land be acquired on Ocean Avenue to the rear of Harbor School, and that a new school, designed to accommodate 850 pupils, be built there. During the transition period the present Harbor building will be used. This will help carry District III over the student bulge which will come in 1955-56. As soon as possible, the present school should be replaced by a new school on Ocean Avenue.

Four schools are now being operated within the boundaries of District III, one is uneconomically small, none have adequate sites. By consolidation to K-8, buildings will become available for use in these grades. It is suggested that the capacity of Harbor School be enlarged to provide additional classrooms, gymnasium, auditorium, library, and lunchroom needed for a school to serve 800 pupils. The site of the Nathan Hale School should be developed to provide playground and playing fields. Nathan Hale can continue in use for central bus and locker facilities and special classes. If the Harbor School should be closed as soon as possible, it is suggested that the site be developed as soon as possible.

made adequate, and if its construction were such that it could be operated and maintained economically in the years ahead, it might be worth while remodeling and adding to it and making it a part of the permanent school plant.

Actually other schools are relatively near by and better located as to noise and size of site for outdoor activities.

District V. At present there is no school in District V. Bartlett School is now filled to capacity with children in grades K-5 from this area. As new homes are built in the northern and western section of this district the pressure for additional facilities will increase. Bartlett School is old, its site is inadequate, and it lacks the facilities needed for a good program. It would be uneconomical to expand the present site by demolishing nearby homes and to attempt at the same time to remodel the old building and to add the facilities that are needed.

A site of not less than 5 acres and preferably 10 or more acres should be secured in the vicinity of Morgan Park, and as soon as possible Bartlett School should be replaced. The Bartlett School might possibly be of use as an annex to Chapman Tech, or its site developed into playing fields for Tech.

District VI. Winthrop School is old - built in 1892, has only basement toilets and lacks auditorium, gymnasium, library, etc. Its site is relatively undeveloped and small. It is poorly located for the long-range development program. Children out Bayonet Street, Williams Street, and Mohegan Avenue have well over a mile to walk to school. Because of its location and age it would be wise to plan to replace it on a site in the vicinity of Williams Street, north of New Street. Whether or not Connecticut College might be willing to sell land for this purpose should be investigated. In any event, the present building should not be included in the long-term plan.

Priorities

It is always difficult to place priorities in a program. In the first place, once needs are faced there is the urge to say that all needs are present ones. Secondly, changing conditions may radically alter the urgency of needs. Thus a

and if its construction were such that it could be operated and maintained economically in the years ahead, it might be worth remodeling and making it a part of the permanent school plant.

Actually other schools are relatively near by and better located as to noise and site for outdoor activities.

At present there is no school in District V. Bartlett School is now located to capacity with children in grades K-8 from this area. As new homes are built in the northern and western section of this district the pressure for additional facilities will increase. Bartlett School is old, its site is inadequate, it lacks the facilities needed for a good program. It would be uneconomical to expand the present site by demolishing nearby homes and to attempt at the same time to remodel the old building and to add the facilities that are needed.

A site of not less than 5 acres and preferably 10 or more acres should be located in the vicinity of Morgan Park, and as soon as possible Bartlett School should be replaced. The Bartlett School might possibly be of use as an annex to the Tech, or its site developed into playing fields for Tech.

Winthrop School is old - built in 1892, has only basement facilities for auditorium, gymnasium, library, etc. Its site is relatively undeveloped. It is poorly located for the long-term development program. Children living on West Street, Williams Street, and Morgan Avenue have well over a mile to school. Because of its location and age it would be wise to plan to replace a site in the vicinity of Williams Street, north of New Street. Whether a connection College might be willing to sell land for this purpose should be considered. In any event, the present building should not be included in the plan.

Facilities

It is always difficult to place priorities in a program. In the first place, needs are faced there is the urge to say that all needs are present ones. Changing conditions may radically alter the urgency of needs. Thus a

priority plan of today should be subject to review and revision each year in the light of changes which occur. It would seem wise at this time to set up priorities as follows:

Priority 1: Secure new sites as recommended.
Replace Nameaug School to have the new building ready for September 1951.
Enlarge Jennings School to be ready for September 1951.
These steps will permit the closing of Saltonstall School by September 1951

Priority 2: Replace Bartlett School.

Priority 3: Replace Winthrop School.

as of today should be subject to review and revision each year in the
cases which occur. It would seem wise at this time to set up priorities

where new sites are recommended.
Lafayette Normal School to have the new building ready for September 1951.
Lafayette Normal School to be ready for September 1951.
These steps will permit the closing of Lafayette Normal School by September
1951

Lafayette Normal School.

Lafayette Normal School.

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